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ABSTRACT

This study investigated the relationship between school staff job satisfaction or morale and a number of organizational changes and practices occurring at the Portsmouth (New Hampshire) Junior High School. The issues under examination included homogeneous vs. heterogeneous grouping, class length, school-within-a-school or teaming, department chairs versus house coordinators, a flexible or modular scheduling as factors that might affect staff morale, communication, and student learning. Using an evaluation design, the research team undertook a descriptive case study of the match between school philosophy and the scheduling practices related to teacher teaming and student ability grouping. Data were collected from all school staff concerning opinions of the scheduling, teaming, and ability grouping practices, along with self-report measures of staff emotional exhaustion, negative attitudes toward students, and feelings of personal accomplishment. Findings, reported in detail, suggest that low levels of emotional exhaustion and high feelings of personal accomplishment correlate strongly with provision of adequate time to reach time management and planning objectives. Researchers conclude that scheduling should include staff input to reflect individuals' need for effective planning time. References are included, along with five appendixes listing organizational changes at the school, sample surveys and results, school history, and interview questions. (TE)

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ACTION RESEARCH ON CHANGE IN SCHOOLS: THE RELATIONSHIP BETWEEN TEACHER MORALE/JOB SATISFACTION AND ORGANIZATIONAL CHANGES IN A JUNIOR HIGH SCHOOL

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STATEMENT OF THE PROBLEM

The New Hampshire Action Research on Change in Schools (ARCS) team began the 1981-1982 school year discussing problems in education and in their own school in particular. Many of the concerns we identified (e.g., homogeneous vs. heterogeneous grouping, school-within-a-school, class length, house coordinators vs. department chairs) fell into the broad category of scheduling, an area which affected teaching and learning conditions in the school. Preliminary investigation into the issue of scheduling and organizational changes made by a new principal led us to refocus on a narrower issue related to scheduling and to the concerns raised above. We chose to investigate the relationship between school staff job satisfaction/morale and a number of organizational changes/practices occurring at the Portsmouth Junior High School (PJHS).

STATEMENT OF THE QUESTION

Our research question evolved during the first eight months of the project, paralleling our decisions about a researchable problem. We initially chose to research the question, "How can we make scheduling changes to improve teaching and learning conditions at PJHS?" We focused particularly on the issues of homogeneous vs. heterogeneous grouping, class length, school-within-a-school or teaming, department chairs vs. house coordinators, and flexible or modular scheduling as factors which might affect staff morale, communication and student learning.

Preliminary data collection and analysis as well as further discussion of these concerns caused us to focus more specifically on the relationship between staff morale and several organizational practices in the school. We then identified several research questions which addressed this problem.

1. Do organizational changes effected between 1981-82 and 1982-83 at the junior high school (see Appendix A) affect school staff morale/job satisfaction?
2. Do organizational changes at the junior high school affect school staff's perceptions of teaming, grouping of students, communication with colleagues and administration, time management, and teaching assignment?
3. Is goal clarity and involvement in policy decision making related to staff morale/job satisfaction?

REVIEW OF RELATED LITERATURE

The literature reviewed in this section was identified by conducting ERIC searches utilizing the following descriptors: middle school/junior high scheduling, flexible scheduling, house plan, homogeneous/heterogeneous grouping. Additional relevant materials on teacher morale/job satisfaction were reviewed from a second ERIC search and from additional readings over the year.

Junior High Scheduling

During our initial ERIC search, the following articles provided the team with information about schedule issues faced in other schools and communities. Once the team shifted its focus to the issue of teacher morale, these articles were less directly relevant.

Ray Costantino and Charles Larue (1974) described a program for middle school science which included a team approach and a three year rotation. The science teacher on the ARCS team felt the PJHS science program was more adequate.

Donald W. Johnson (1976) reported on developing and implementing an effective student and teacher assignment schedule. Johnson gave information about strategies for collecting information which would lead to a workable schedule for students, teachers, and administrators. The article included sample schedules, parent survey, assessment graphs for math and reading tests, profiles of district performance and state performance in testing program. Because the school context described by Johnson seemed to include many of the same issues the PJHS action research team was exploring, this article was very pertinent to our original research question.

In James Cole's (1975) paper, variable junior high school schedules were developed to inject variety and expanded course offerings in the traditional daily schedule. This report presents tables, figures, and diagrams which explain the Racine, Wisconsin junior high school variable scheduling plan. Sample student schedules, programs of studies, the rotation cycle, and comparisons with traditional scheduling are included. The new principal at PJHS kept a copy of this article because of its clarity in the mechanics of scheduling.

In Gary, Indiana at the Edison Middle School a new placement and grouping system is being used in math (Dongu, 1979). Math tests were sorted according to the lowest math skill not mastered by each student. Students were then placed in special classes devoted entirely to one specific math skill. No attention was paid to grade levels in these classes. When the citywide checkpoint exam was administered the following spring to all seventh and eighth graders, Edison scores were the best in the city. Results like this seem to present a strong argument for grouping according to achievement levels in math rather than math grouping within grade levels as is currently being practiced at PJHS.

The effect of class heterogeneity in junior high school English classes was investigated by Carolyn M. Evertson, Julie Sanford and Edmund Emmer (1981). The data cited in this study was collected from 27 junior high school English classes in a large metropolitan school district. Variables of degree of homogeneity, classroom management, adaptation of instruction to individuals, and student task engagement and cooperation were studied. Findings suggest that extremely heterogeneous (English) classes appear to have limitations in student achievement and task engagement and cooperation of students which are related to the teacher's classroom management skill and adaptability to student's needs. These authors suggest that extremely heterogeneous classes are less than ideal for a learning environment. These last two articles are helpful to the ARCS team because Portsmouth Junior High

School's administrators' and teachers' scheduling objectives are moving from extreme heterogeneous grouping in all subjects to top students in math and English being homogeneously grouped within grade level (see SOS questionnaire results in Appendix B).

Teacher Morale and Scheduling

Several themes of the ARCS team's discussions of our school context were in the areas of lack of communication, low teacher morale and teacher's lack of satisfaction in their ability to do a good job. Members of the team became increasingly interested in these issues and their relationship to the project's initial focus of scheduling.

A review of the literature indicates that the most current work in teacher morale is being researched under the focus of stress in teaching. An article by Elizabeth S. Manera and Robert E. Wright (1979), "Stress Factors in Teaching," had three groups of teachers participate in a Q-sort of 14 stress factors related to their job field. The broad concept of communication seemed "embedded in the top four items selected by the participants." Although classroom management and discipline are mentioned as top concerns of teachers in current articles these authors suggest that "perhaps communication or the lack of communication tends to cause more stress among educators. . .."

Additional articles on teacher stress which were reviewed focused on the new concept of teacher "burnout": Who are our burned out teachers? How can we identify stress leading to burnout? What elements in a teacher's job definition or the context of the school may contribute to stress leading to burnout? How does teacher stress show up in attitudes toward students and students' learning? (Iwanicki & Schwab, 1981; Schwab & Iwanicki, 1982a, 1982b; Schwab, 1982).

Schwab and Iwanicki (1982), in describing who are our burned out teachers, state first, a major aspect of burnout is the development of feelings of emotional exhaustion and fatigue. A second major aspect is the development of negative attitudes toward the people with whom the affected people work. The third aspect is the loss of the feelings of accomplishment derived from the job. These three ways in which professionals encounter stress result from the constant and intensive involvement with people and can lead to a loss of care and commitment which is not characteristic of their original attitudes.

Causes of Stress and Burnout

A number of recent studies and articles describe causes of teacher stress.

Sparks (1979) suggests the major causes of teacher stress are: (1) high involvement and limited power, (2) the nature of the inter-personal relationships in the school, and (3) teacher perceptions of role conflicts. The interaction of these factors may be important in describing reasons for high teacher stress. The ARCS team examined some of these issues in its surveys and interviews.

Scrivens (1979) suggests most burnout exists in teachers who have worked for more than 10 years. In PJHS sample, 50% of the teachers have more than ten years of experience.

F. C. Ellenberg (1972) reviewed the factors affecting teacher morale and summarized the major conclusions drawn from several studies:

1) student achievement increased under teachers with high morale and decreased under teachers with low morale
2) teacher morale assists in establishing "school character" or climate
3) the more democratic the school administration, the higher the morale (Burkett, 1965)
4) salary affects level of morale for some teachers and not others
5) personal factors are most important in determining an individual's level of morale
6) teacher's relationship with principal is a key non-personal factor (Hood, 1965)
7) teacher participation in administrative decisions is related to morale (Leiman, 1961)

Ellenberg concludes by suggesting that administrator's attitudes, policies, procedure, understanding of teachers, and philosophical approach to problems are a major factor in teacher morale.

Kathleen Booher (1978) reacts to "middle school melancholia" and says junior high/middle school teachers are made to feel like losers for the following reasons:

1) they are neglected by central administration
2) administrative decisions are made without considering these teachers
3) administration focuses on what high school teachers think junior high/middle school teachers should teach
4) administration minimizes importance of junior high/middle school
5) there is no recognition of junior high/midle school teacher accomplishments.

Booher calls for administrative support for junior high/middle school teahers to improve teacher morale.

In Douglas Heath's (1981) summary of his extensive research on faculty burnout, morale and vocational adaptations, he states that teacher morale may be deteriorating because the intrinsic rewards for teaching are lower now than they used to be. High job morale comes from an optimal relationship between job adjustment and personal fulfillment. Teachers in the past had higher vocational adaptation, despite low job salaries because they got intrinsic rewards from helping children develop, receiving community and parent respect, achieving personal fulfillment. It is these intrinsic values in teaching which are lower today: children are harder to teach, parents and community give less respect, and teachers feel they are realizing less of their potential. Thus, teacher morale remains low even as salaries go up.

In a recent NEA-NOW newsletter (March 14, 1983) David Lipsky of the New York State Industrial Labor Relations, Cornell University, stated that "There's no evidence that promise of extra pay improves a teacher's classroom performance. Most teachers do their best regardless of the circumstance." The same newsletter reported that research has shown, however, that teachers' experience and education is positively related to student achievement.

Manera and Wright (1979) suggest that recognizing stressors is a major factor in successfully dealing with job stress. In their research in teaching, 14 categories were ranked by participants to show how much stress the item produced in their life. 91 educators, two classes of graduate classroom teachers, and public school administrators rated time management, individualized instruction, and judging people as the most stressful factors in teaching. Accepting and using other people's expertise and building a professional reputation were listed as least stressful.

School Climate, Organizational Structure and Teacher Morale

A number of studies relate the organizational structure and school context to teacher morale.

Dennis (1973), in an exploratory analysis of school climates, reviewed past studies on morale and lists the following major conclusions as factors affecting morale in the schools:

1) Morale is a function of many interrelated variables.
2) There is a lack of instruments to measure morale.
3) The immediate supervisor/administrator is important to a teacher's morale. A democratic administration can offset other factors which typically produce low morale.
4) Congruity of perceptions and expectations or lack of it between school boards and teachers is important to teacher morale.
5) Administrators and teachers often have different views of levels of morale and what is important to teachers morale. A larger discrepancy between their expectations results in lower morale.
6) Preparation programs for teachers which develop, or fail to change, unrealistic attitudes about teaching result in low morale.
7) Research needs to be done on the relation of teacher morale to teaching performance and to administrative personnel policies and practices in the school.

Dennis then went on to study two junior high schools - one with and one without morale problems. He utilized four instruments, two for students, one on self esteem and one on school atmosphere, and two for teachers, one on how staffs feel about co-workers and supervisors, and a second instrument measuring how satisfied they are with the degree of participation and recognition received from their work.

Specifically, the teacher instruments measured:

"supportiveness" - a person's feelings that she/he is accepted, respected, and encouraged to function as a competent, effective individual
"change leadership" - a person's feeling that there is a sincere concern to find, develop and implement better ways of doing high quality work.

Dennis concludes that there are five aspects of the work situation that are related to teacher morale:

Work planning and coordination
Work productivity
Work incentive (i.e., salaries, benefits which are adequate)
Work environment
Work resources - setting (sufficient to do an adequate job)

William C. Miller (1981) discussed staff morale, school climate, and educational productivity. His comments can be grouped in four major areas as he reviewed the research findings:

1) The social climate of school and staff morale can affect student attitudes and learning
2) Administrative behavior can be important in facilitating positive staff morale and he cites the following behaviors:

   - praising and giving support
   - supporting teacher in conflicts with students and parents
   - giving attention to teachers' physical comfort
   - assuming responsibility for administrative actions
   - demonstrating knowledgeability about current practices and strategies
   - encouraging teachers' professional growth

3) Research shows an open climate vs. closed climate can affect student attitude toward learning and problem solving ability. Administrators play an important role in establishing the positive climate.
4) In particular, Miller cites the research of Aspy and Roebuck (1974) showing that "teachers can change when they work in situations with high levels of facilitative conditions."

Schambier (1981) cites the organizational structure of school decision making as a major source of teacher stress and burnout in an article entitled: "What to do when the Pyramid Crumbles: The Path from XA+YB Leadership." Schambier suggests that teachers burnout because all decisions are usually made by administrators rather than by or in collaboration with teachers. Teachers are then expected to carry out those decisions.

Sandra Kurtz (1980) presented an annotated bibliography on teacher stress and burnout. Studies and articles particularly relevant to the present study are summarized below.

Moe (1979) sets individualistic sources of counteracting burnout. He suggests that teachers should:

- exercise
- leave their teaching at school
- develop a hobby
- get plenty of sleep
- keep a diary
- learn to say no
- set realistic and flexible goals
- take a sabbatical or leave of absence

William Bosher, Jr. (1978) expresses an additional point of view. He says that junior high/middle school teachers must be their own advocates to fill in the information void about junior high/middle schools. Bosher admits the pressing need for outside recognition but also distinguishes the necessity of a positive self-image and a sense of worth on the part of teachers. Finally, Bosher points to the interdependence of elementary, junior high and high school curricula with all groups participating equally in decision making from their own knowledge and experience bases.

Many articles in the literature suggest only individualistic ways teachers can cope with stress. It is important to note that ARCS questions about change in scheduling as related to stress is a different approach which takes into consideration the larger context of the school environment and school organizational structure.

Reed (1979) suggests ways principals can help prevent burnout in teachers as follows:

- build self-esteem
- involve teachers in decision making
- communicate with each member of the staff
- push for professional growth
- promote skeptical and mental well being
- offer release time
- involve parents in the learning process

Flint (1982) brought up three areas for discussion; two of the reviews seem important to ARCS research in teacher morale and job satisfaction. First, he discusses tests for stress and burnout, and then he points to school organizational development and areas of the work environment that can be manipulated to create job satisfaction.

First, Flint reviews the history of stress burnout research since the 1970s. His definition of "eustress" to mean good or positive stress is helpful because it recognizes that teaching, as a human service organization, involves a certain amount of stressful conditions which encourage teachers to continually challenge themselves in the search for better teaching strategies. This "eustress" is positive for teacher and student learning. Then, Flint gives concise examples of different kinds of measures for stress and their pros and cons. His summary reinforced the ARCS team decision to use the newer Maslach and Jackson measure for stress and burnout. This instrument will be discussed in the Design section of this report.

Finally, Flint asks a number of important questions related to the organizational development of the schools and the areas of the school work environment that can be manipulated to create teacher job satisfaction. These are:

- quality of leadership
- advancement opportunities
- level of job security
- physical and psychological work climate
- job demands
- decision making latitude

One member of the team studied the following survey instrument considered for use in collecting data on teacher morale and job satisfaction. These were the Leadership Behavior Description Questionnaire (LBDQ), the Organizational Climate Description Questionnaire (OCDQ), the Job Satisfaction/Dissatisfaction Questionnaire, and the Minnesota Teacher Attitude Inventory (MTAI). This teacher recommended that the ARCS team use the Maslach Burnout Inventory (Human Services Survey) designed by Christina Maslach and Susan Jackson and validated with teachers by Richard Schwab and Edward Iwanicki (1981). She cited a number of reasons which convinced the team of the value in using the Human Services Survey to gather information for this part of the research plan.

This review of the literature was undertaken as the ARCS team discussed the general issue of school scheduling and then focused on teacher morale/job satisfaction as it existed at PJHS and was related to teaching and learning conditions in the school. The next section describes the design of the study on teacher morale and job satisfaction.

RESEARCH DESIGN/METHODOLOGY

Selection of Research Strategies and Framework

The team considered many factors before choosing a design framework: time factors (length of project and personal time), team members' familiarity with research procedures, appropriateness to study the school context, and exploration of research question and subquestions. Discussion of research design centered around the research and development and the evaluation frameworks (Borg & Gall, 1981).

The ARCS team finally decided that an evaluation design would be the best choice. Within this framework, the team undertook a descriptive case study of Portsmouth Junior High School, the school philosophy, and the match between the philosophy (goals, objectives, and junior high priorities) and the scheduling practices related to teacher teaming and student ability grouping. The ARCS team described the current school context and philosophy and current practices. The team analyzed the strengths and weaknesses of

current practices in light of teacher morale, job satisfaction, and feelings of accomplishment in student learning. We will make recommendations which will be 1) consistent with our operational definition of what a junior high school is and 2) substantiated by our surveys and literature review.

Site and Participants

The New Hampshire team is located at an urban junior high school which serves 680 seventh and eighth graders. The school population includes students from a variety of socio-economic backgrounds and students from nearby U. S. Air Force and Naval bases. Of the school's 680 students, 15% qualify as economically disadvantaged under Title I, and approximately 7% are Black, Indian, Hispanic, or Asian.

The school staff tends to be experienced and stable. Of the fifty-two full-time staff members, forty-two have taught at this school for more than four years. About half of the staff have taught for four to eleven years; the other half have taught for twelve or more years. In September, 1981, the school principal resigned and accepted an assistant superintendency elsewhere. The new principal, appointed in November, 1981, was a former mathematics teacher and house coordinator at the junior high school.

In 1975, the school principal organized the junior high into four houses, or schools-within-a-school. Each house consisted of teachers from the four major academic subject areas, a house coordinator (also a part-time teacher), and a group of students. In 1980, because of declining enrollment and reductions in staff, students and teachers were assigned to three rather than four houses. In 1982, house coordinators were replaced by department chairs in an attempt to address central office concerns about curriculum development. Academic teachers continued to meet weekly with their house, in meetings run by either the principal or the assistant principal. At present, houses have fewer disciplinary or academic responsibilities than they did in the past. (For more school history, see Appendix C.)

In 1981-82 48 out of the total staff of 52 responded to the survey. Between the pre-test and the post-test nine of the teachers left the school. Thus, of 52 total school staff in 1982-83, 48 of 51 responded to the second survey.

All teaching and administrative staff 1981-82 and 1982-83 from a New Hampshire junior high school participated in this evaluation study. The staff ranged from 3 to 33 years of experience (see Table 1).

TABLE 1

Description of Portsmouth Junior High School Staff,
1981-82, 1982-83

1981-82 School Staff

Total in School	Number Responding to Survey Spring 1982	Subject Taught
6	6	English
8	8	Math
6	5	Science
6	6	Social Studies
8	8	Shop(4) & Home Ec(4)
6	6	Music(2), Art(2) & Phys Ed(2)
6	5	Guidance(2), Admin(2), Nurse(1), Libr(1)
6	4	Spec Ed, Reading(4)
52	48	

Years of teaching experience*: 1 staff had taught 0- 3 years
22 staff had taught 4-11 years
22 staff had taught 12+ years
*3 responses not codable

1982-83 School Staff

Total in School	Number Responding to Survey Fall 1982	Subject Taught
6	6	English(6)
7	8*	Math
6	4	Science
6	6	Social Studies
8	7	Shop(4), Home Ec(4)
6	5	Music(2), Art(2) & Phys Ed(2)
6	6	Guidance(2), Admin(2), Nurse(1), Libr(1)
6	6	Special Ed & Reading
51	48	

*One mathematics teacher left the school but responded in Year 2 to the HSS.

Data Collection

Kinds of Data to be Collected. In order to answer the research questions posed at the beginning of this paper, we collected data from all school staff at Portsmouth Junior High School concerning their opinions of the schedule and teaming and ability grouping practices. We also collected self report measures of staff emotional exhaustion, negative attitudes toward students, and feelings of personal accomplishment using the Human Services Survey (Maslach Burnout Inventory). Data collection took place in May, 1982 and again in December, 1982 to enable us to analyze the strengths and weaknesses of current practices as well as organizational changes which occurred in September, 1983. The following data were collected as summarized in Table 2.

Research question #1: Do organizational changes effected between Year 1 and Year 2 affect school staff morale/job satisfaction scores on the HSS?

Data: 1) Levels of emotional exhaustion, depersonalization (negative attitude toward students), and personal accomplishment of PJHS school staff. These are the three subscales of the Human Services Survey.

Research question #2: Do organizational changes at the Junior High affect school staff's perceptions of: a) teaming, b) job satisfaction, c) communication with colleagues, d) communication with administration, e) time management and f) teaching assignment.

Data: 2) PJHS staff opinions about teaming and homogeneous/heterogeneous grouping practices and staff perceptions of the relation of these variables to job satisfaction, level of morale, and student learning.

Research question #3: Is goal clarity and involvement in decision making related to staff morale/job satisfaction scores on the HSS?

Data: 3) PJHS staff's HSS scores on all three subscales grouped into thirds: high, moderate and low. Responses of staff in each third on the issues of communication with administration (goal clarity and involvement).

Data Collection Procedures. The team used the following data collection procedures:

a) Teacher members of ARCS team divided staff and conducted personal surveys with PJHS staff December, 1981 on scheduling practices and concerns. This survey was entitled Staff Opinion Survey.
b) Staff of PJHS were surveyed in May of 1982 and again in December of 1982 on: 1) scheduling practices and changes in teaming and ability grouping and 2) job satisfaction/morale.

TABLE 2

Data Collection and Analysis

Research Question	Data Source	Kind of Data	Date
0. What are staff scheduling concerns?	Staff Opinion Survey (SOS)	Staff Opinion on scheduling practices (Appendix B)	December 1981
1. Do organizational changes at PJHS affect staff morale/job satisfaction?	- Human Services Survey (HSS)	- Levels of emotional exhaustion depersonalization, and personal accomplishment of school staff (Appendix D)	May 1982 (pre) December 1982 (post)
	- School documents	- List of organizational changes (Appendix A)	September 1982
2. Do organizational changes at PJHS affect staff perceptions of teaming, job satisfaction, communication with colleagues and administration, time management and teaching assignment?	- School Survey (SS)	- Staff opinions about teaming, job satisfaction, communication, with colleagues and administration, time management, teaching assignment (Appendix D)	May 1982 (pre) December 1982 (post)
	- Teacher interviews	- Same (Appendix E)	October 1982
3. Is goal clarity and involvement in decision making related to staff morale/job satisfaction?	- HSS	- Scores divided into high, moderate and low thirds	May 1982 (pre) December 1982 (post)
	- SS	- Staff opinions about goal clarity and decision making (communication with administration)	December 1982 (post)
	- Interview with principal	- School philosophy and scheduling practices at PJHS	May 1982
	- Teacher interviews	- Teacher perception of school philosophy and goals	October 1982

TABLE 2 (continued)

Data Collection and Analysis

Research Question	Analysis Procedure
0.	Tabulated responses
1.	Correlated t-test
2.	5 point Likert scale collapsed to three groups: agree/disagree/undecided Percentages of agree/disagree/undecided calculated for each of 21 School Survey questions Percentages in May 1982 data compared to December 1982 data Teacher interviews, transcribed and coded to correspond to six groupings of SS questions
3.	HSS responses divided into thirds: HI, MODERATE, LOW - Percentages of agree/disagree/undecided on 21 SS questions calculated for all staff in HI HSS group - Percentages of agree/disagree/undecided on 21 SS questions calculated for all staff in MODERATE HSS group - Percentages of agree/disagree/undecided on 21 SS questions calculated for all staff in LOW HSS group - Percentages of agree/disagree in HI HSS group were compared with LOW HSS group for each SS question - Interviews transcribed and coded to correspond to six groupings of SS questions.

c) Literature was reviewed to investigate if teacher morale was linked to scheduling.
d) A description was written of the history of the policies and decisions related to scheduling practices in the last 10 years at Portsmouth Junior High School.
e) A list was made of organizational changes at Portsmouth Junior High School between Year 1 and Year 2 of the study (Appendix A).
f) The principal was interviewed about the school philosophy (goals, objectives, and junior high priorities) and scheduling practices at Portsmouth Junior High School.
g) Interviews were conducted with randomly selected teachers on their perceptions of school philosophy and goals, scheduling practices of teaming and grouping, and the effects of these practices on the teaching and learning environment in the school.

Data Sources

Staff Opinion Survey. We developed a questionnaire called the Staff Opinion Survey (SOS) (see Appendix B) in order to solicit staff opinions on scheduling practices. The team randomly divided all staff into five groups to be surveyed. A numbering system 1-5 was repeated over and over on an alphabetical list of all staff until each staff person was matched to a number. One team member surveyed all "1s," a second team member surveyed all "2s," etc. The SOS was personally administered to each staff member by a member of the team. This approach resulted in a high response rate.

From the survey results, the ARCS team identified four primary areas of concern:

homogeneous vs. heterogeneous grouping of students
schools-within-a-school teaming practices
class length
house coordinators vs. department chairs

School Survey. A School Survey of 21 questions was designed by the team and used to gather school staff opinions on issues of teaming, grouping of students, communication with colleagues and administration, time management, and teaching assignment (see Appendix D). The purpose of the School Survey was to determine whether school staff agreed or disagreed with current school practices in these areas. This survey was adapted from the Norup Teacher Survey (1982) on the basis of the areas of concern identified in the SOS. Questions on involvement in decision making and clarity about goals were added to reflect our teams' concerns. This survey was given during Year 1 and Year 2; in May 1982, just before the close of school in June and December 1982, between Thanksgiving and Christmas. These were considered equally stressful times in a teacher's school year. The pre-post-test administration allowed for comparison in rates of agreement.

To ensure a good response, team members individually contacted staff members to ask for their participation. This personal contact resulted in 48 responses from 52 staff in June 1982 and 48 responses from 51 staff in December 1982.

In the December 1982 School Survey one additional question was asked referring to a recent increase in salary (1982-83). This question was asked to see if an average pay increase of 6% would affect teacher morale/job satisfaction.

Human Services Survey. The Maslach Burnout Inventory (MBI) was chosen as the index of perceived stress (burnout) in our population of junior high school staff (see Appendix D). A cross-validation study of the MBI (Iwanicki & Schwab, 1981) indicated internal reliability based on the frequency and intensity subscales for teachers was consistent with reliability for helping professions. This survey was given to staff with the School Survey in May and December, 1982.

School History. During initial discussions of school context, one team member compiled a history of school changes covering the previous ten years. This history provided a useful focus for our understanding of how change had occurred. Since there was no existing file kept by the school, the documentation came from memos, agendas, but mostly collective staff memories. In September, 1982, the school history was updated to include organizational changes occurring at that time. The school history is outlined in Appendix C.

Interview with New Principal. Two members arranged an interview in May 1982 with the new principal in order to elicit his description of the school philosophy, goals, objectives, and scheduling priorities of PJHS and his working definitions of terms such as teaming and grouping.

Interview with Teachers. Six teachers were interviewed in depth for the purpose of probing their view and understanding of school goals, organizational changes, teaming, and grouping of students (questions asked are listed in Appendix E). Staff members chosen to be interviewed had HSS subscale scores which were high or low in relation to other staff members.

The interviews were transcribed, and passages were used to illustrate or question the trends found in the quantitative data. In addition, when questions arose in the data analysis, we were able to go back to the interviews for more clarification.

Data Analysis

School Survey Q-Sort. Responses on the pre- and post-test were grouped into total number of respondents and repeaters. Repeaters were identified as school staff having completed both Spring and Fall Surveys. Several research team members independently identified groupings for School Survey questions. The total research team gave consensual agreement resulting in groupings: teaming, job satisfaction, communication with colleagues and administration, time management and teaching assignment. These groupings of questions are used for convenience in data analysis and are not to be considered subscales as the HSS subscales have been defined and validated. The 5 point Likert Scale responses for each question in the six groups of questions were collapsed into agree, disagree, and undecided. Percentage of respondents in each category were computed for pre- and post-test for all responders and for repeaters. It was noted that there were 10 changes

in school staff membership between Spring and Fall. Some School Survey and HSS responses were incomplete while a few others chose to respond to either the Spring 1982 or Fall 1982 survey but not both.

Computer Program. The pre- and post-testing of 57 total respondents generated an overwhelming data base. One team member developed computer programs to facilitate the analyses. The program helped the team to perform the analyses summarized in Table 2.

FINDINGS

Overview

The first activity of the New Hampshire ARCS group was to survey the school's staff for the purpose of identifying the major educational concerns. The plan was to develop an appropriate research question based on the concerns we would discover. The team developed the Staff Opinion Survey (SOS) to identify teacher opinion on current scheduling practices at PJHS.

The key issues of concern uncovered by the SOS were homogeneous vs. heterogeneous ability grouping of students, class length (time), schools-within-a-school, teaming, and department chairpersons vs. house coordinators. Scheduling was selected as the focus for research at this point because it encompassed all these areas.

The next step was to state a research question in terms of scheduling. The research group's efforts toward this end were lengthy, difficult, and ultimately fruitless. Eventually, it was decided to pursue the research from a different point of view. Teacher morale had been discussed over and over in terms of the school context and seemed related to the issues of concern listed above. The ARCS team discovered that research questions could readily be stated with teacher morale as the focus. Teacher morale, then, was adopted as the theme for the project.

Changes were effected at PJHS between Year 1 and Year 2 of the ARCS study (see Appendix A). It seemed natural to expect that these changes might be accompanied by changes in staff approval/disapproval of the school organization and by changes in the level of staff morale/stress. The ARCS team decided to collect evidence to determine the level of any change in staff opinion and stress/morale level. Separate, simultaneously administered instruments were used to collect the desired data.

Morale/job satisfaction was measured using the Maslach Burnout Inventory (Maslach & Jackson, 1981) commonly referred to in surveys as the Human Services Survey (HSS). To determine staff perceptions of the teaching/learning environment, the ARCS team created an instrument labelled the School Survey (SS). The SS is a collection of 21 statements requiring a Likert response ranging in 5 points from definitely agree to definitely disagree. The statements selected were based on the areas of concern identified by the SOS.

The HSS and the SS were administered once during Year 1 of the ARCS project (pre-test) and again during Year 2 (post-test). Findings based on the information generated by these instruments are given in the subsections below. Various organizational changes (see Appendix A) distinguished Year 1 from Year 2. An important phase of our study is the comparison of the HSS and SS pre-test results (Year 1) against the post-test results (Year 2). It was expected that the changes would be parallelled by shifts in the level of teacher morale and new patterns of staff opinion regarding the issues of concern in school organization. The purpose of this section of the report is to summarize the actual findings.

For the purpose of clarity the SS items were sorted according to these categories: teaming, communication with colleagues, communication with administration, time management/planning, grouping of students, and teaching assignment. Trends in the collected data are noted in this section. Interpretation follows in the Conclusions section.

Research Question #1: Do organizational changes at the Junior High School affect school staff morale/job satisfaction?

A correlated t-test on each of the HSS subscales (see Table 3) indicated no significant change in the school staff who took both the 1981-82 and 1982-83 tests (the repeaters). Specifically, on the Emotional Exhaustion frequency subscale, teachers taking both pre- and post-tests there were no differences in the extent to which these teachers felt emotionally drained and "used up."

On the Personal Accomplishment frequency subscale, our junior high staff who took both pre- and post-test did not show differences in the extent to which they feel competent and successful in their job from 1981-82 to 1982-83.

On the Depersonalization subscales, both frequency and intensity, there were no differences in the staff taking both pre- and post-tests. The group of repeaters at the junior high school shows no difference between 1981-82 and 1982-83 in the extent to which they have developed feelings of callousness, cynicism, and insensitivity toward students.

Comparison of the junior high school morale/job satisfaction scores on the HSS with a group of Massachusetts teachers (Iwanicki & Schwab, 1981) and a group of New Hampshire NEA teachers (Schwab, Jackson & Schuler manuscript in progress) shows that the mean scores are similar (see Table 4).

Research Question #2a: Do organizational changes at the junior high affect school staff's perceptions of teaming?

Three questions on the School Survey referred to teacher participation on a team (questions 3, 9, and 10). On both the pre-test and post-test most teachers agreed with the statement "team teaching is beneficial to teachers." There was no difference in the pattern of response in the repeaters group (see Table 5).

TABLE 3

Subscales of Maslach Burnout Inventory*

A. Emotional Exhaustion

1. I feel emotionally drained from my work.
2. I feel used up at the end of the workday.
3. I feel fatigued when I get up in the morning and have to face another day on the job.
6. Working with people all day is really a strain for me.
8. I feel burned out from my work.
13. I feel frustrated by my job.
14. I feel I'm working too hard on my job.
16. Working with people directly puts too much stress on me.
20. I feel like I'm at the end of my rope.

B. Depersonalization

5. I feel I treat some students as if they were impersonal objects.
10. I've become more callous toward people since I took this job.
11. I worry that this job is hardening me emotionally.
15. I don't really care what happens to some students.
22. I feel students blame me for some of their problems.

C. Personal Accomplishment

4. I can easily understand how my students feel about things.
7. I deal very effectively with the problems of my students.
9. I feel I'm positively influencing other people's lives through my work.
12. I feel very energetic.
17. I can easily create a relaxed atmosphere with my students.
18. I feel exhilarated after working closely with my students.
19. I have accomplished many worthwhile things in this job.
21. In my work, I deal with emotional problems very calmly.

*Items as amended by Schwab (1980) to reflect the teaching profession. From Iwanicki and Schwab (1981).
High degrees of burnout are reflected in high mean scores on A and B and a low mean score on C.

TABLE 4

Comparison of ARCS and Other
Maslach Burnout Inventory Subscale Statistics

	Emotional Exhaustion				Personal Accomplishment				Depersonalization			
	ARCS pretest	ARCS posttest	Iwanicki & Schwab*	Schwab Jackson Schuler**	ARCS pretest	ARCS posttest	Iwanicki & Schwab*	Schwab Jackson Schuler**	ARCS pretest	ARCS posttest	Iwanicki & Schwab*	Schwab Jackson Schuler**
Frequency												
Number of items	9	9	9	9	8	8	8	8	5	5	5	5
Mean	19.06	19.64	22.30	22.63	36.26	36.74	37.36	38.01	7.35	6.79	7.40	6.92
Standard deviation	10.68	12.18	11.63	10.61	6.73	6.10	6.58	6.36	5.60	5.94	6.25	5.50
N=	33	33	469	227	35	35	469	227	34	34	469	227
Intensity												
Number of items	9	9	9		8	8	8		5	5	5	
Mean	25.84	26.94	29.74		39.09	39.72	41.63		9.55	10.48	9.25	
Standard deviation	12.66	15.68	13.45		7.29	6.30	7.09		7.21	8.52	7.35	
N=	32	32	469		32	32	469		33	33	469	

*Iwanicki and Schwab (1981) Massachusetts teachers (grades 1-12)

**The New England Educator's Study, Schwab, Jackson, and Schuler. Manuscript in process. (NEA New Hampshire public school teachers randomly selected members from grades 1-12)

TABLE 5

School Survey Responses on Teaming

2. Team teaching is beneficial for teachers.

Total		Agree	Disagree	Undecided
	[1]			
pre	(n=45)	78%	4%	11%
post	(n=44)	70%	8%	22%
Repeaters				
	[2]			
pre	(n=34)	81%	6%	13%
post	(n=34)	73%	8%	19%

9. You like to be part of a teaching team.

Total		Agree	Disagree	Undecided
pre	(n=42)	74%	14%	12%
post	(n=43)	63%	14%	23%
Repeaters				
pre	(n=33)	76%	15%	9%
post	(n=34)	62%	15%	24%

10. You prefer to work individually rather than with a team.

Total		Agree	Disagree	Undecided
pre	(n=42)	21%	64%	14%
post	(n=46)	22%	53%	24%
Repeaters				
pre	(n=34)	24%	71%	6%
post	(n=36)	25%	53%	22%

[1] Total number of pre-test and post-test respondents is 48. Numbers of n presented here and in later tables reflect the resulting n after subtracting those who did not respond to this particular survey item.

[2] Total number of repeaters is 38 for each question. Numbers given here and in the following tables reflect the resulting n after subtracting those who did not respond to a particular survey item.

All of the teachers who disagreed (two people on pre-test and three on post-test) were science teachers. Five of the six science teachers completed the survey. This disagreement by half the science department may be due to their idea of teaming. The science department had a successful team department at one time. Presently teams are interdepartmental; the science teacher on the research team suggests that some science teachers may prefer to have departmental teams.

The next two questions on teaming deal with the issue of whether the school staff members like to be part of a teaching team or prefer to work individually. In both pre- and post-tests, more than 60% of the staff responded that they "liked to be part of a teaching team." The pattern of response was the same in the repeaters as in the total group. The rate of agreement in the low, moderate, and high groups across the HSS intensity subscales parallels that of the total respondents. Agreement was lower on the post-test than the pre-test. At the same time, the percentage of undecided respondents grew from 12% to 23%. The response pattern for the statement "you prefer to work individually rather than with a team" showed simmilar results, with a majority of the staff preferring to work on a team rather than individually.

Science, home economics, shop and social studies teachers account for the shift in the undecideds. In the post-test, three of six social studies teachers were undecided; four of seven shop and home economics teachers were undecided; and two of five science teachers were undecided. This indecision may be the result of different working definitions of a teaching team. For instance, home economics and shop are part of departmental teams, but they do not meet with a school-within-a-school team. They may not consider themselves to be members of a teaching team. As mentioned in the preceding question, science teachers have been on a successfully working departmental team and are undecided on the value of an interdepartmental school-within-a-school team. During an in-depth interview an academic teacher was asked, "Would you like to see changes in the team, what should it be or what should it do that is not being done now?". This teacher responded:

> I think it would be better if the team could include some specialists, somehow, some way, so that you would not just see the other teachers that you have for an academic subject, but you would also be able to talk to a teacher who has that person in say, home economics or music or shop and get some insight and feeling of how that student is doing in that subject, too.

This teacher's idea of teaming had been consistent: "I like to work with other teachers, have always valued working with other teachers, and I dislike being isolated."

A specialist teacher, responding to interview questions about the teaming of teachers in school-within-a-school, said:

> Well, I am a specialist, a specialist is not part of any school . . . so I don't have much contact with any of the schools . . . .. I think specialists should be on a team. I think we should be assigned to some school.

An academic teacher was asked "Do you think teaming is valuable?" and commented:

> Definitely. Because I think we have a better hold on kids and we know kids better. It isn't a matter of looking at a youngster in isolation and saying - . . . he isn't doing well in class, and just putting them through an assembly line and really not thinking about that. When you meet somebody else and say, the same person isn't doing very well in a couple of other classes. It may not be you, but it might be something going on with the youngster.

Then the same teacher was asked "Does teaming affect your working conditions here?"

> I would say so. I think insofar as you have a hold on youngsters and a better way of dealing with them. It certainly affects it.

The final question on teaming was "Do you think it affects the student's achievement and learning conditions?" This teacher responded:

> Yes, because I think on a discipline end of things, I think it keeps a better view of the discipline problems. on the learning situations, I think if the youngster is having problems I think we're more likely to identify youngsters with learning disabilities and learning problems in a teaming approach rather than just seeing them one period a day and then not thinking about them. When you get together with a couple of other teachers, and you are finding there are the same difficulties cropping up in other classes, you are more likely to look at it and say, I'd better make a referral about this.

Another academic teacher said:

> Well, the only thing that the team is now, really, is just, a group of four individuals who share the same students. And we know we share those students. So that dialogue about the students and their particular problems and concerns is more possible. But we're very, very far away from true teaming. Or even less than true teaming. We just really, we've completely departed from the concept. The only thing that I said is that it does allow dialogue about kids we have in common.

Research Question #2b: Do organizational changes at the Junior High affect staff's perceptions of job satisfaction?

Four questions on the School Survey referred to staff job satisfaction (#1, 20, 21, 22). On the pre-test only 24% of the school staff (30% of the repeaters) agreed that their "current schedule best utilizes your talent as a teacher." In the post-test 42% agreed (44% of the repeaters). On each test approximately 30% were undecided. In all, 58% of the staff on the post-test did not agree that their current schedule best utilized their talent as a teacher. The shift toward more agreement occurs in all subject areas except English, science, and special education where there was no change (see Table 6).

On the pre-test 64% of the staff agreed that they were "satisfied working with the present members of their team." On the post-test 83% were in agreement. Only one person disagreed with this statement. Agreement rate of the repeaters group was nearly the same (66% and 84%). On all three HSS intensity subscales, high, low, and moderate groups tended to respond to this question in the same pattern as the composite.

Although responses to the previous question indicate that staff is satisfied with the present members of their teams, they are not satisfied with the present ability grouping of students. In both the pre- and post-tests only two-fifths of the staff agreed that they were "satisfied with the present homogeneous and heterogeneous grouping of students." In the repeaters group 53% agreed on the pre-test, but only 40% agreed on the post-test. Despite changes to homogeneous grouping in math and English only two of six math teachers and two of five English teachers were satisfied with grouping on the post-test.

The ARCS initial Staff Opinion Survey (SOS) in December of 1981 indicates that both academic and non-academic teachers felt that math and English should be homogeneously grouped, and that specials, social studies, and science should be heterogeneously grouped (39 of 44 staff agreed in each case). Furthermore, 32 of 44 respondents were in disagreement to the statement that homogeneous grouping by ability for all classes was best.

In the interview in 1982 one academic teacher responded to this issue as follows:

> I disagree with ability grouping only as far as going too far with it. My only fear with ability grouping is that we do not get to a stage where every single class will be grouped from, you know, the top, top, top to the top to the middle top and then middle, middle and then lower middle and so on. I don't feel that every single class should be grouped. I feel that, sure, some students who are deserving and excel and have that ability to move on academically on their own should have that opportunity. But I think that is a small number of students compared to the majority, and I think that the majority of students prefer just to work as the group and learn from each other not just from people who may be the exact same ability.

TABLE 6
School Survey Responses on Job Satisfaction

1. Your current schedule best utilizes your talent as a teacher.

Total	Agree	Disagree	Undecided
pre (n=46)	24%	46%	30%
post (n=45)	42%	29%	29%
Repeaters			
pre (n=37)	30%	41%	30%
post (n=36)	44%	31%	25%

20. You are satisfied working with the present members of your team.

Total	Agree	Disagree	Undecided
pre (n=39)	64%	21%	15%
post (n=40)	84%	2%	14%
Repeaters			
pre (n=38)	66%	19%	15%
post (n=38)	84%	3%	13%

21. You are satisfied with the present homogeneous and heterogeneous grouping of students.

Total	Agree	Disagree	Undecided
pre (n=45)	42%	29%	29%
post (n=45)	38%	31%	31%
Repeaters			
pre (n=36)	53%	17%	31%
post (n=35)	40%	31%	29%

22.

Total	Agree	Disagree	Undecided
post only (n=45)	33%	44%	23%
males	32%	56%	30%
females	28%	30%	16%
years of experience			
4-12	21%	71%	8%
12+	42%	35%	23%

When considering the relation of grouping to students' learning and achievement, this teacher also said:

> I think in the junior high if you start grouping and just group all lower kids together you get a detrimental affect on learning, and it becomes strictly discipline situation. And that I do not want to see happen. I think that the better kids from the better homes can learn a lot from kids who come from more disadvantaged backgrounds by being with them in class, and that the disadvantaged background children can learn from the ones with a better background. I think that is a valuable experience, and I think junior high students are better for it. So I don't feel that they should be separated according to - Oftentimes, their ability is also so much money their parents make or how good their parents situation is outside of school.

Another teacher spoke to the effect of homogeneous and heterogeneous grouping of students on teachers' working conditions.

> Its a hard question to answer. We have different subjects and different concerns in all those subjects. And then right within my own subject, there is a variety of concerns about what should be homogeneously grouped or heterogeneously grouped. Unfortunately, there isn't any other way to teach English but homogeneously grouped classes. And, I guess the kind of homogeneous groups that seem to work in English, grouping together kids of higher ability who are pretty much well above average. And not grouping the rest of the people. I think what was always bad about homogeneously grouped classes was the bottom groups of almost no ability being stuck together. It was an atmosphere of despair and confusion, I think, in those really low ability classes.

A specials teacher said:

> I would say that all of our classes are heterogeneously grouped, meaning kids of different abilities are in the class. I personally think that it makes it very difficult at times - especially - citing my class again where you have some extremely capable kids and there are other kids who are behavior problems because they are not as capable. There are times that we get a large group of kids incorporated into the class that are special needs students. It would be a lot easier if they were spread out one or two here and there rather than getting six of them in a class of 22. In the seventh grade this year it happens that we pick them (the special needs students) up sixth period which is our last class and that is making some classes a bit difficult. These students require a little more attention and so forth. I am not totally in favor of isolating them by having them all in one class, but at the same time it would be nice to have some homogeneously grouped kids. They are doing this for algebra. They are doing this for advanced English, and you know, if there is an interest or

a need on the student's part to do it in a specials area, I certainly would like to see it in art.

Question #22 appears on the SS post-test only. It was an attempt to determine the impact of the increased salary levels which took effect for the school year 1982-83. Composite responses to "salary increase has made a difference in my level of job satisfaction" show more disagreement than agreement. 56% of the men vs. 30% of the women disagree. Although the rates of agreement were similar, more men than women were undecided.

When comparing responses to the salary questions in terms of years of experience, 42% of teachers with more than 12 years of experience agree while only 21% of less experienced teachers agree. 35% of teachers with 12 or more years of experience disagree, while 71% of the less experienced teachers disagree. It is pertinent to note that the salary increases were more substantial for the more experienced people.

In a Comparison of Ranks of Attributes that contribute to vocational satisfaction, Douglas Heath (1981) reports that on 28 attributes salary or income ranked 28th in importance and 28th in actual satisfaction for teachers which was similar to other professions where salary/income was ranked 28th in importance and 27.5 in actual satisfaction.

Some responses from staff members on the salary question are interesting:

> Believe it or not, the raise, the money raise was not so much a factor with me as it was that the fact that my wife was rehired in teaching. It is very depressing when you have your wife at home who has been laid off twice as a teacher and is very upset about that and have come in to work and try to teach. So as far as the raise that is a very good thing, I think as teachers we deserve to be paid much better than we are, but for me to have my wife have professional satisfaction and be back to teaching is more valuable.

Another teacher said:

> You know, its hardly perceptible in today's economy.

Research Question 2c: Do organizational changes at the Junior High affect staff's perceptions of communication with colleagues?

Three questions on the School Survey referred to the time staff members have for communicating with their colleagues (#3, 4, 5). On both the pre- and post-tests, only one-third of the staff agreed with the statement, "You have time to talk to other staff members." Even fewer staff agreed that they had "time to share ideas and materials with other staff members." More staff agreed that they had "time to discuss student problems with a colleague." Responses from repeaters on all three questions are within 2 to 5 percentage points of the totals (see Table 7).

TABLE 7

School Survey Responses on Communication with Colleagues

3. You have time to discuss student problems with a colleague.

Total		Agree	Disagree	Undecided
pre	(n=47)	43%	34%	23%
post	(n=47)	55%	23%	21%
Repeaters				
pre	(n=38)	39%	37%	24%
post	(n=37)	57%	22%	22%

4. You have time to talk to other staff members.

Total		Agree	Disagree	Undecided
pre	(n=47)	38%	40%	21%
post	(n=47)	38%	32%	31%
Repeaters				
pre	(n=38)	37%	42%	21%
post	(n=37)	38%	27%	35%

5. You have time to share ideas and materials with other staff members.

Total		Agree	Disagree	Undecided
pre	(n=47)	30%	21%	49%
post	(n=46)	33%	37%	30%
Repeaters				
pre	(n=38)	32%	50%	18%
post	(n=37)	38%	35%	27%

On the question about time to discuss student problems with colleagues, the shift toward greater agreement in the post-test seems to have occurred across subject areas, and may be the result of more regular team meetings, or more teachers (e.g., special education teachers) participating in team meetings. Because team meetings tend to be devoted to discussion of student problems, staff members may feel they have more time available for this kind of communication with colleagues than for sharing other ideas, materials, and concerns.

When asked, "Do you feel that you have sufficient time to communicate with your fellow teachers?" one teacher said:

> No, I don't. That to me is the biggest problem in the school is the lack of communication between teachers. There is just no time to see other teachers other than the ones that you work with in your particular school. There is just no time to really sit down and talk with teachers in general during the school day.

Another teacher responded:

> Absolutely not. There is just not enough time in the day to be able to either communicate with colleagues about problems or concerns within the school or the building or about students or about ideas, projects or whatever.

On all three questions concerning communication with colleagues, shop and home economics teachers tended to agree, and academic teachers tended to disagree that they had time to talk with other staff members. For example, on question #3, six of seven shop and home economics teachers agree they have time to discuss student problems with a colleague, while 10 of 22 academic teachers agreed. On question #4, five of seven shop and home economics teachers who responded agreed they had time to share ideas and materials, while only five of the 21 academic teachers who responded agreed. Shop and home economics teachers share lunch and planning periods and have rooms located near one another. Because of this they may have more opportunity to communicate with their colleagues about student problems as well as other ideas and materials.

A specials teacher, however, noted:

> Yes, I do. I have plenty of time with them, talk to them . . .. Of course, the colleagues I communicate with are mostly shop teachers, and I spent 95% of my time right in this room and they are pretty great - cooperate about what kind of programs we run, things like that.

Research Question #2d: Do organizational changes at the Junior High affect staff's perceptions of communication with administration?

Four questions dealt with issues of communication with administration (#16, 17, 18, and 19). Communication with administration was also addressed during the individual interviews with a subset of staff. Three different staff commented as follows:

For the most part, I think we have time during our planning period and they (administration) were pretty good when you want to meet with them.

- - - -

I guess I don't personally make time. If it doesn't conveniently fit into my schedule, I make an adjustment somehow, whether it means getting somebody to cover a class for a few minutes or stopping into the office and seeing if the principal has a free moment second period tomorrow or, is 7th period better or something like that? Since we have a new principal here, I have felt more at ease communicating with administration. I think he has lent that to the staff. With his nature, you know, making time available first thing in the morning if you're passing through and have a quick concern or comment or whatever, you can take that few minutes and know he will be there.

- - - -

I feel that for the most part I have time to do that only because I may feel a little more comfortable working with the office now than I have in the past and so if I do have something, you know, I feel confident enough to go down and say what I think. Whether or not anything is done about it is still an issue, but at least I feel I can go down and say what I think.

But, when asked specifically to respond to the following school survey statements, staff opinion was more varied and more negative regarding their communication with administration in terms of involvement in decision making and clarity of goals on teaming and grouping (see Table 8).

Just over one quarter of the staff on both the pre- and post-test felt they "have been involved in scheduling decisions on teaming." Responses from repeaters show the same results.

A second question dealing with communication with administration was "you have been involved in scheduling decisions on heterogeneous and homogeneous grouping of classes." On this question only 23% of all staff agreed on the pre-test, and only 33% agreed on the post-test. In the group of repeaters, roughly the same percentage of agreement occurred.

On the question, "you are clear about the goals on teaming," the percentage of staff who agree goes from 24% on the pre-test to 30% on the post-test. The percentage of staff who disagree changes from 59% on the pre-test to 33% on the post-test. Undecideds double from the pre-test to post-test. Because of a new principal who took office in mid-year, staff may have been unsure and, therefore, the increase of undecideds may show suspended judgment. Even with some scheduling changes and the principal being in his first full year in Fall, 1982, less than one-third of the staff in Fall,

TABLE 8

School Survey Responses on Communication with Administration

16. You have been involved in scheduling decisions on teaming.

Total		Agree	Disagree	Undecided
pre	(n=43)	27%	52%	21%
post	(n=44)	27%	64%	9%
Repeaters				
pre	(n=35)	31%	57%	12%
post	(n=34)	24%	65%	11%

17. You have been involved in scheduling decisions on heterogeneous and homogeneous grouping of classes.

Total		Agree	Disagree	Undecided
pre	(n=43)	28%	63%	12%
post	(n=45)	33%	60%	7%
Repeaters				
pre	(n=35)	31%	63%	6%
post	(n=35)	34%	60%	6%

18. You are clear about the goals of teaming at PJHS.

Total		Agree	Disagree	Undecided
pre	(n=46)	24%	59%	17%
post	(n=46)	30%	33%	37%
Repeaters				
pre	(n=37)	27%	51%	22%
post	(n=36)	33%	31%	36%

19. You are clear about the goals of heterogeneous and homogeneous grouping of students at PJHS.

Total		Agree	Disagree	Undecided
pre	(n=45)	29%	44%	27%
post	(n=47)	21%	45%	34%
Repeaters				
pre	(n=36)	36%	39%	25%
post	(n=37)	24%	35%	41%

1982, is clear on goals of teaming while more than two-thirds of the staff is either unclear or undecided. In the group of 37 staff who were repeaters, taking both pre- and post-tests, the percentages were very similar for agree, disagree, and undecided.

In the final question dealing with the issue of communciation with administration, "you are clear about the goals of heterogeneous grouping of students," the staff (and repeaters) are even less clear about the goals of grouping in Fall, 1982 than they were in Spring, 1982. In Fall, 1982, only 21% of the school staff feels they are clear on goals of grouping (10 out of 47 teachers). If responses from the shop/home economics teachers are not included, then only 12% of the school staff agrees that they are clear on grouping goals in the school. The changes from Spring to Fall show drops in percentages of agreement, similar levels of disagreement and increases in percentage of undecideds.

In the group of repeaters, teachers who have been at the school for years, the shifts are slightly more pronounced: agreement on clarity of grouping goals drops from 36% to 24%, disagreement drops slightly from 39% to 35%, while undecideds increase from 25% to 41%.

Research Question #2a: Do organizational changes at the Junior High affect staff's perception of teaching assignment?

Staff members were asked four questions relating to their teaching assignment (#11, 12, 14, 15). Given the statement, "everyone should teach reading," on the School Survey, 48% agreed on the pre-test and 61% agreed on the post-test. Responses of repeaters were similar. Since 61% of the staff agree, this question might bear further investigation when considering curriculum development. The ARCS team feels this question is open to interpretation. It would need probes to draw further conclusions. For example, were teachers using a reference point of teaching reading in content area or teaching reading as a separate subject? It would seem reading has wide support among school staff. The distribution of scores on high, moderate, and low subscales parallels distribution on the composite (see Table 9).

Staff were asked, "do you prefer teaching one grade level?" At pre-test 41% agreed and at post-test 55% agreed. In both years (1981-82 and 1982-83) academic teachers prefer teaching one grade level. Only three (3) out of twenty (20) academics on the post-test disagreed. Ten (10) out of sixteen (16) specials and special education teachers disagreed on the post-test. The change from pre- to post-test in agreement occurs in the areas of industrial arts, home economics, art, music, and physical education. The ARCS team could not account for this shift.

TABLE 9

School Survey Responses on Teaching Assignment

11. Every teacher should teach reading.

Total		Agree	Disagree	Undecided
pre	(n=46)	48%	28%	24%
post	(n=44)	61%	23%	16%
Repeaters				
pre	(n=37)	51%	24%	24%
post	(n=34)	59%	24%	18%

12. You prefer to teach one grade level.

Total		Agree	Disagree	Undecided
pre	(n=42)	41%	48%	11%
post	(n=44)	55%	34%	11%
Repeaters				
pre	(n=36)	39%	50%	11%
post	(n=35)	60%	29%	11%

14. Scheduling should permit a matchup between teachers' teaching styles and students' learning styles.

Total		Agree	Disagree	Undecided
pre	(n=46)	61%	4%	35%
post	(n=45)	49%	15%	36%
Repeaters				
pre	(n=37)	57%	5%	38%
post	(n=36)	53%	17%	31%

15. Scheduling should be done so that class loads are relatively equal.

Total		Agree	Disagree	Undecided
pre	(n=46)	77%	14%	9%
post	(n=46)	80%	11%	9%
Repeaters				
pre	(n=37)	78%	16%	5%
post	(n=36)	78%	14%	8%

Staff were asked if they thought "scheduling should permit a match up between teacher's teaching style and student's learning style." 61% agreed, 4% disagreed, and 35% were undecided on the pre-test School Survey.

When asked if they preferred scheduling "so that class loads are relatively equal?" staff agreed on both pre- and post-tests.

Research Question #2f: Do organizational changes at the Junior High affect staff's perception of time management and planning?

Four questions on the School Survey referred to time management and teacher planning (#6, 7, 8, 13).

Question number six asked whether "there is time to make teacher-made materials and lesson plans?" In the pre-test 36% of the teachers agreed; in the post-test 47% agreed with the statement. In the pre-test 36% disagreed while in the post-test 26% do not feel they have time to make materials and lesson plans. 27% are undecided both times (see Table 10).

Staff were asked whether "you have time to form lesson objectives and break them down into smaller steps." On the post-test only one-third of the staff agreed. Most teachers either disagreed or were undecided.

The next School Survey question asked whether "your schedule provides planning time to accommodate individual differences among students." On the pre-test 26% agreed, and 33% agreed on post-test. There was movement from 59% disagree to 45% disagree from pre-test to post-test. The shift was found to be primarily in shop and home economics. It may point to the fact that these subject areas having common planning time and smaller classes are more able to accommodate individual differences.

The last Survey item deals with the idea that "each teacher should have the same amount of planning time." The majority of professional staff agreed with this statement.

Research Question #3: Is goal clarity and involvement in policy decision making related to staff morale/job satisfaction?

In examining teacher responses on the School Survey in relation to teacher level (high, moderate, low) on the Human Services Survey, the ARCS team found significant differences in the areas of communication with colleagues, communication with administration, and teacher planning and time management.

Communication with colleagues. When looking at responses of teachers who scored in the high, moderate and low groups on the HSS, the ARCS team found that teachers low in depersonalization and emotional exhaustion felt that they did have time to talk to other staff on all three questions concerning communication with colleagues. Those who were high in emotional exhaustion and depersonalization felt that they did not have time to talk to colleagues. In addition, teachers who have low feelings of accomplishment tend to feel they do not have time to communicate with colleagues, while those who have high feelings of personal accomplishment do tend to feel have time to talk with colleagues (see Table 11).

TABLE 10

School Survey Responses on Time Management and Planning

6. There is time to make teacher-made materials and lesson plans.

Total		Agree	Disagree	Undecided
pre	(n=44)	36%	36%	27%
post	(n=45	47%	26%	27%
Repeaters				
pre	(n=35)	40%	37%	23%
post	(n=36)	53%	28%	19%

7. You have time to form objectives and break them down into small steps.

Total		Agree	Disagree	Undecided
pre	(n=43)	35%	37%	28%
post	(n=44)	32%	36%	32%
Repeaters				
pre	(n=34)	38%	41%	20%
post	(n=35)	37%	34%	29%

8. Your schedule provides planning time to accommodate individual differences among students.

Total		Agree	Disagree	Undecided
pre	(n=46)	26%	59%	14%
post	(n=46)	33%	45%	22%
Repeaters				
pre	(n=37)	27%	59%	14%
post	(n=37)	38%	43%	19%

13. Every teacher should have the same amount of planning time.

Total		Agree	Disagree	Undecided
pre	(n=46)	74%	15%	11%
post	(n=47)	62%	17%	21%
Repeaters				
pre	(n=37)	68%	19%	14%
post	(n=37)	62%	22%	16%

TABLE 11

School Survey Responses on Communication with Colleagues which Varied Significantly According to Hi/Moderate/Low Levels of Emotional Exhaustion or Personal Accomplishment or Depersonalization*

COMMUNICATION WITH COLLEAGUES

4. You have time to talk to other staff members.

		Response to Survey Item #4 Agree	Disagree	Undecided
Feelings of Emotional Exhaustion				
Hi intensity	(n=16)	13%	63%	25%
Moderate intensity	(n=13)	30%	23%	46%
Low intensity	(n=16)	69%	6%	25%

		Response to Survey Item #4 Agree	Disagree	Undecided
Feelings of Personal Accomplishment				
Hi intensity	(n=12)	67%	25%	8%
Moderate intensity	(n=17)	24%	35%	41%
Low intensity	(n=15)	27%	27%	47%

		Response to Survey Item #4 Agree	Disagree	Undecided
Feelings of Depersonalization				
Hi intensity	(n=15)	33%	47%	20%
Moderate intensity	(n=16)	31%	31%	38%
Low intensity	(n=13)	54%	15%	31%

*Three subscales on The Human Services Survey (Maslach Burnout Inventory, Maslach & Jackson, 1980)

TABLE 11 (continued)

School Survey Responses on Communication with Colleagues which Varied Significantly According to Hi/Moderate/Low Levels of Emotional Exhaustion or Personal Accomplishment or Depersonalization

COMMUNICATION WITH COLLEAGUES

3. You have time to discuss student problems with a colleague.

		Response to Survey Item #3 Agree	Disagree	Undecided
Feelings of Emotional Exhaustion				
Hi intensity	(n=16)	31%	44%	25%
Moderate intensity	(n=14)	43%	21%	29%
Low intensity	(n=16)	88%	6%	6%
Feelings of Personal Accomplishment				
Hi intensity	(n=12)	91%	8%	0%
Moderate intensity	(n=17)	41%	35%	23%
Low intensity	(n=15)	40%	20%	40%
Feelings of Depersonalization				
Hi intensity	(n=15)	40%	47%	13%
Moderate intensity	(n=16)	50%	25%	25%
Low intensity	(n=13)	86%	0%	14%

5. You have time to share ideas and material with other staff members.

		Response to Survey Item #5 Agree	Disagree	Undecided
Feelings of Emotional Exhaustion				
Hi intensity	(n=16)	6%	69%	25%
Moderate intensity	(n=11)	27%	36%	55%
Low intensity	(n=15)	67%	13%	20%
Feelings of Personal Accomplishment				
Hi intensity	(n=12)	67%	25%	8%
Moderate intensity	(n=17)	24%	35%	41%
Low intensity	(n=15)	20%	47%	33%
Feelings of Depersonalization				
Hi intensity	(n=15)	27%	47%	27%
Moderate intensity	(n=15)	20%	47%	33%
Low intensity	(n=13)	54%	15%	31%

Communication with administration. It is interesting that on the HSS Personal Accomplishment subscale, the percentages are quite different from the composite on the question of staff involvement in scheduling decisions on grouping. Of staff having high feelings of personal accomplishment, 64% agree with the statement, while 79% of staff with low feelings of personal accomplishment disagree with the question and say they have not been involved in scheduling decisions on grouping (see Table 12). In the composite School Survey responses (from Table 8) in Fall, 1982, 60% of the total staff (and the same percent of repeaters) feel they have not been involved in decisions on grouping.

On the teaming issue, 55% of staff in the high personal accomplishment category agree that they have been involved in scheduling decisions on teaming while only 8% of staff with low feelings of accomplishment agree. School Survey composite results on this question, as reported earlier in Table 8, show that only 27% of the total staff in Fall, 1982 agree that they have been involved in scheduling decisions on teaming.

On the HSS subscale for Emotional Exhaustion of those staff in the high emotional exhaustion category, only 6% agree they are clear on goals of teaming while 50% disagree. In the moderate and low categories of emotional exhaustion, almost the opposite is true; 46% of staff with low or moderate levels of exhaustion agree they are clear on goals of grouping and only 18% disagree.

Staff who score high on the Emotional Exhaustion subscale of the HSS have a 6% agreement rate with this question on clarity of goals of grouping, while 37% disagree, and 56% indicate they are undecided. In the group of staff with moderate levels of emotional exhaustion, 15% agree they are clear on grouping goals, 31% disagree, and 54% are undecided. In the group of staff with low levels of emotional exhaustion, 44% agree they are clear on goals of grouping, 25% disagree, and 31% are undecided. Thus, it is staff with low levels of emotional exhaustion who have the highest agreement rate with the question on clarity of grouping goals. From the composite School Survey results, however, only 21% of the total school staff agreeing that they are clear on goals of grouping (refer to Table 8). We can see that the issue of homogeneous and heterogeneous grouping is still an issue of concern for the school. This issue appeared in our original Staff Opinion Survey (SOS) in Winter, 1981, as a priority concern of the staff, and it appears to continue to be a major unclear issue in the school.

There does seem to be a difference on the HSS subscales in teacher response to the statement that they have time to make materials and lesson plans. Staff who feel low levels of personal accomplishment (40% disagree, 20% agree) and high levels of emotional exhaustion (50% disagree, 31% agree) feel that they do not have time to make materials and lesson plans. The opposite is true for staff with high feelings of personal accomplishment (66% agree, 12% disagree) and low levels of emotional exhaustion (60% agree, 13% disagree); they do feel they have time to make materials and lesson plans.

TABLE 12

School Survey Responses on Communication with Administration which Varied Significantly According to Hi/Moderate/Low Levels of Emotional Exhaustion or Personal Accomplishment or Depersonalization*

COMMUNICATION WITH ADMINISTRATION

16. You have been involved in scheduling decisions on teaming.

		Response to Survey Item #16		
		Agree	Disagree	Undecided
Feelings of Personal Accomplishment				
Hi intensity	(n=11)	55%	45%	0%
Moderate intensity	(n=17)	18%	76%	6%
Low intensity	(n=13)	8%	69%	13%

17. You have been involved in scheduling decisions on heterogeneous/homogeneous grouping of classes?

		Response to Survey Item #17		
		Agree	Disagree	Undecided
Feelings of Personal Accomplishment				
Hi intensity	(n=11)	64%	18%	18%
Moderate intensity	(n=17)	29%	71%	0%
Low intensity	(n=14)	14%	79%	7%

18. You are clear about the goals of teaming at PJHS.

		Response to Survey Item #18		
		Agree	Disagree	Undecided
Feelings of Emotional Exhaustion				
Hi intensity	(n=16)	6%	50%	44%
Moderate intensity	(n=13)	38%	15%	46%
Low intensity	(n=15)	53%	20%	27%
Feelings of Personal Accomplishment				
Hi intensity	(n=11)	45%	36%	11%
Moderate intensity	(n=17)	35%	47%	18%
Low intensity	(n=15)	13%	20%	67%

19. You are clear about the goals of heterogeneous/homogeneous grouping of students.

		Response to Survey Item #19		
		Agree	Disagree	Undecided
Feelings of Emotional Exhaustion				
Hi intensity	(n=16)	6%	38%	56%
Moderate intensity	(n=13)	15%	31%	54%
Low intensity	(n=16)	44%	25%	31%

*Three subscales on The Human Services Survey (Maslach Burnout Inventory, Maslach & Jackson, 1980)

TABLE 13

School Survey Items of Teacher Planning and Time Management which Varied Significantly According to Hi/Moderate/Low Levels of Emotional Exhaustion or Personal Accomplishment or Depersonalization*

6. There is time to make teacher-made materials and lesson plans.

		Response to Survey Item #6		
		Agree	Disagree	Undecided
Feelings of Emotional Exhaustion				
Hi intensity	(n=16)	31%	50%	19%
Moderate intensity	(n=12)	50%	17%	33%
Low intensity	(n=15)	60%	13%	27%
Feelings of Personal Accomplishment				
Hi intensity	(n=12)	66%	12%	17%
Moderate intensity	(n=16)	63%	25%	13%
Low intensity	(n=15)	20%	40%	40%

8. Your schedule provides planning time to accommodate individual differences among students.

		Response to Survey Item #8		
		Agree	Disagree	Undecided
Feelings of Emotional Exhaustion				
Hi intensity	(n=16)	12%	69%	15%
Moderate intensity	(n=13)	31%	38%	31%
Low intensity	(n=15)	53%	33%	13%
Feelings of Personal Accomplishment				
Hi intensity	(n=12)	66%	33%	0%
Moderate intensity	(n=17)	29%	53%	18%
Low intensity	(n=15)	13%	53%	33%
Feelings of Depersonalization				
Hi intensity	(n=15)	27%	47%	27%
Moderate intensity	(n=15)	20%	53%	27%
Low intensity	(n=13)	54%	38%	8%

*Three subscales on The Human Services Survey (Maslach Burnout Inventory, Maslach & Jackson, 1980)

The overall findings on the School Survey questions dealing with time management and teacher planning was that staff members with low levels of emotional exhaustion and high feelings of personal accomplishment feel that they have sufficient time to reach time management and planning objectives. Teachers who have high levels of emotional exhaustion and low feelings of personal accomplishment do not feel they have sufficient planning time to make lesson plans, form objectives and break down into smaller steps, and accommodate individual student differences.

CONCLUSIONS

CONCLUSIONS REGARDING THE LACK OF DIFFERENCE IN HSS SCORES YEAR 1 TO YEAR 2

Research Question #1: Do organizational changes at the Junior High School affect staff morale/job satisfaction?

In relation to research question #1, the following conclusions were made.

There was no significant difference in level of job satisfaction/morale as measured by the HSS test in a correlated t-test from Year 1 to Year 2 with repeaters. Our expectations for changes from Year 1 to Year 2 in job satisfaction/ morale HSS scores was perhaps unwarranted. The organizational changes implemented were not designed to and, in fact, did not address the areas of concern identified by the staff.

For instance, in the original School Opinion Survey early in Year 1 the concerns identified were: 1) homogeneous vs. heterogeneous grouping of students, 2) house coordinators vs. department chairs, 3) class length in terms of time, and 4) schools-within-a-school (or teaming issues).

On the grouping issue the organizational changes involved math and English classes. In Year 1 of our study there was one algebra and one advanced English class in each 8th grade team. During Year 2 it was expanded to include also one advanced English and one pre-algebra class in each grade 7 team. Results from the original Staff Opinion Survey early in Year 1 indicated overall staff approval of this type of change, with 39 of 44 staff feeling that math and English should be homogeneously grouped.

In the School Survey pre-test (prior to the additional change to advanced 7th grade classes in Year 2), 53% of the repeaters agreed with the statement that they were satisfied with the present homogeneous/heterogeneous grouping system. After the changes, the School Survey post-test showed only 40% of the repeaters in agreement with the same statement. Even within the math and English departments, 4 of 6 math teachers and 3 of 5 English teachers were not satisfied with grouping as indicated by their post test responses.

Elsewhere in this paper a lack of staff involvement in policy decision making is discussed. If the English and math teachers had perceived greater involvement in the changes which so greatly affected their departments they might, in fact, have agreed with the statement in Year 2 that they "are satisfied with the present homogeneous and heterogeneous grouping of students."

In addition, we note that 39 of 44 staff were in agreement on the original Staff Opinion Survey that social studies, science, and specials should be heterogeneously grouped. Thus, the present practice of homogeneous grouping in math and English classes only is in accordance with staff preferences.

A second area of concern was the issue of house coordinators vs. department chairpersons. On the School Opinion Survey, early in Year 1, staff opinion was virtually split on this issue. During Year 2 of our study a change was made and department chairs replaced house coordinators. Despite the fact that this was a major change, it could not be expected to lead to change in morale/job satisfaction because of the neutralizing effect of the even split of staff opinion.

A third area of concern was the issue of length of time of classes. On the original Staff Opinion Survey in Year 1 all but two academic teachers were in agreement that 45-50 minute classes were best. About half the specials teachers said 60-70 minutes were best. Therefore, the change made to 50 minute classes in Year 2 could not be expected to affect the morale/job satisfaction of all staff.

A fourth identified area of concern was schools-within-a-school/teaming. No changes were made with respect to this issue in Year 2.

The other organizational changes in Year 2 (e.g., electives in art and music, all teachers have homeroom duty and study hall duty, etc. - see Appendix A) had little to do with the areas of staff concern identified on the original Staff Opinion Survey.

We feel the organizational changes were not accompanied by change in level of morale because staff opinion was split about house coordinators/department chairs and length of class time and no organizational changes occurred in teaming. When changes were made in the area of grouping, teachers felt the changes were made without their involvement.

CONCLUSIONS REGARDING THE SCHOOL SURVEY PRE-TEST AND POST-TEST

Research Question #2: Do organizational changes at the Junior High School affect teacher perceptions of teaming, job satisfaction, communication with colleges and administration, time management and teacher assignment?

Teaming

The teachers at Portsmouth Junior High School feel teaming is beneficial to teachers; they like to be part of a teaching team. They prefer to work with a team rather than individually. Only one respondent is not satisfied with working with present members of their team. This suggests that strong efforts should be made to maintain teaching teams at PJHS.

Communication with Administration

Interview responses suggest that we have a principal who is available for staff to talk to. Staff seem to value this availability. Survey results indicate, however, that staff perceive that they are not involved in making decisions on teaming and grouping, nor are they clear about the school goals of teaming and student grouping.

In response to the question, "Do you feel that this school has a philosophy or general goals?" one teacher said:

> I would say yes to that. I am not sure I can be specific as to what they are. I don't think of any one point in time since I was hired here, I ever got to see a piece of paper that said this was Portsmouth Junior High School's philosophy. . . . I think something should be written down, something spelled out in black and white. . . . When you start talking about philosophy, things can get pretty nebulous. And actually break down and itemize some certain goals or things for the school - its a good idea that it was done and available . . ..

Our interview with the principal indicates he is clearer on the school's goals of teaming and grouping:

> The school will still be sectioned into three teams, with the seventh grade team and the eighth grade team, and my reason for that, for keeping that, and I think probably the reason it came about in the beginning when we first started this was to keep the kids in a smaller unit so that teachers get a chance to know them better, get a chance to meet together where they'd be free at the same time, and to talk about the kids and pretty much the direction they're headed in.

And when asked about grouping of students he said:

> I see it happening more within subjects - I do not see the school moving towards a pure homogeneous setup. We went through that, you know, seven or eight years ago for a number of years, that tracking system, and it didn't work . . .. I see the homogeneous grouping, then again not pure homogeneous grouping in the math and the English areas with the pre-algebra in the seventh, pre-algebra in the eighth, the advanced English in the seventh, the advanced English in the eighth and the French program, those are the areas, you know, we're working with somewhat now and I think we will work with in the future. I can't see us going to a homogeneous grouping in the science classes and the social studies classes.

Our findings show that the teachers at PJHS perceive themselves to be unclear on the goals of teacher teaming and grouping of students. A number of articles in the literature reviewed suggest that when teachers are unclear regarding the goals, this affects their job satisfaction and morale.

Communication with Colleagues

The majority of the staff at PJHS feel they do not have time to "talk to other staff members" or time to "share ideas and materials," and only 55% feel they have time to "discuss student problems with colleagues." More teachers feel they have time to discuss students' problems because weekly team meetings within the school provide that opportunity.

Time Management and Planning/Teacher Assignment

In the area of time management and planning teachers don't seem to feel that they have enough time to accommodate individual differences among students or to make teacher-made materials and lesson plans. This could lead to difficulties with the students who require individualized education plans.

Regarding the statement "every teacher should teach reading" the research team is undecided on why the staff agrees with such a high percentage (61%). It may mean either the staff should teach a skill-reading class or reading should be taught in the content area. This issue could be investigated further.

CONCLUSIONS REGARDING THE HI-MODERATE-LO HSS GROUPS

Research Question #3: Is goal clarity and teacher involvement in decision making related to staff morale/job satisfaction?

When the total staff was divided into thirds, high, moderate, and low groups based on their HSS scores, staff in high and low groups differed on their School Survey responses in three areas: 1) communication with colleagues, 2) communication with administration - i.e., clarity of goals and involvement in decision making, and 3) time management.

Staff with low levels of emotional exhaustion feel they have time to communicate with colleagues; those with high levels of emotional exhaustion do not. Staff with low levels of depersonalization also feel they have time to communicate with colleagues. Staff with high levels of depersonalization (callousness, cynicism, and insensitivity toward students) do not feel they have time to talk to colleagues.

Staff having high feelings of personal accomplishment feel they have been involved in scheduling decisions on homogeneous/heterogeneous grouping whereas staff with low feelings of personal accomplishment do not feel they have been involved.

Of those staff with high levels of emotional exhaustion, few agree that they are clear on the goals of teaming and grouping. Staff with low levels of emotional exhaustion, however, tend to agree more than disagree that they are clear on the goals of teaming and grouping.

In general, when staff members perceive there is time and an opportunity for communication with colleagues and administration they also tend to have higher levels of morale/job satisfaction.

The overall findings on the School Survey questions dealing with time management and teacher planning were that staff members with low levels of emotional exhaustion and high feelings of personal accomplishment feel that they have sufficient time to reach time management and planning objectives. Staff who have high levels of emotional exhaustion and low feelings of personal accomplishment do not feel they have sufficient planning time to "make lesson plans," "form objectives and break down into smaller steps" and "accommodate individual student differences." It appears that whenever possible scheduling should include staff input to reflect individuals' needs for effective planning time.

LIMITATIONS

Within the reality of the school setting a number of conditions may have affected our results. First, mortality in the sample from pre- to post-testing resulted in ten teachers, out of a total staff of 52, leaving the school after Year 1 of our study during which the pre-test data had been collected. The correlated t-test on the Human Services Survey (Maslach Burnout Inventory) was calculated using only the "repeaters," those staff who remained at the school both years. The total number of repeaters taking the pre-test and post-test was 38 out of 42 staff remaining in the school both years. Ten new staff joined the school during Year 2 of this study and their perceptions were also important to the research questions. Thus, when School Survey data was analyzed for Year 2 (the post-test data only), the total staff opinion was compared to the opinions of the repeaters.

Direct interview was an important part of this study to gather data from the entire school staff in the original Staff Opinion Survey which helped the team decide staff concerns. There may be biasing of the results by the direct interview method, specifically, the particular bias of the interviewer knowing the interviewee, however, the team decided this was a preferable design than use of an outsider to interview staff or simply handing out questionnaires.

The time of testing may have been a limitation, however, the team chose what they believed to be two equally stressful times in the school year - the pre-testing Year 1 was done in Spring, with one month remaining of school and the post-testing Year 2 was completed within one month prior to Christmas vacation.

All the surveys used in this study are "self-perceptionnaires" and therefore limited by all confounding variables linked to this category of data collection.

Questions arising in recent presentations of the findings and conclusions concern the further examination of Human Services Survey results for particular subgroups, i.e., math teachers, English teachers which we have not presented for every question but have included where the data seemed important. A second set of questions concern individuals who may have changed drastically in their scores or perceptions from Year 1 to Year 2, i.e., going from LO to HI HSS scores. Because confidentiality and anonymity was assured to all participants, the team has been reluctant to pursue this kind of analysis.

IMPLICATIONS AND SUGGESTIONS FOR FURTHER STUDY

The following section lists implications derived from the results and process of this collaborative action research study and suggestions for the future.

1. The effectiveness of the collaborative action research model within an actual project for change should be studied. Such a plan would probably involve the leader of the change project (e.g., principal, superintendent) as a member of the action research team.

   There are many points of view and various schemes for the assessment of the effectiveness of the use of the action research model in conjunction with a change project. For example, the results when the principal is the action research leader could be compared to the results when some other participant serves as leader.

2. A future study might consider the effects of school scheduling changes on the students by interviewing and surveying students or measuring learning achievement or attitude. Although beyond the scope of this study, effects of changes on students could be an important addition to further work in the area of school scheduling.

3. A future action research team could create and implement a program for reducing stress in the school and then evaluate this program by using the HSS in a pre-test/post-test analysis. For instance, involvement in decision making seems to relate to levels of morale/job satisfaction. Conclusions drawn from this study and others reviewed suggest this important organizational change should be studied by administrators and teachers.

4. Teachers who are now experienced in the collaborative action research process could use their skills in promoting the process with other school staffs at other sites.

5. Funding for skilled secretarial support outside the school is a necessary part of the collaborative research process, not usually available at the school site.

6. The keeping of a complete agenda for all meetings over the length of the project is valuable in the collaborative research process and helpful in the end product.

7. Presentations of findings at prestigious national conferences promote feelings of accomplishment for the collaborative action research team members.

8. A clearinghouse or network for communication among ongoing action research projects could be very helpful. For instance, in this project we were able to collaborate and share research design with the Michigan ARCS group during Year 1. Later in Year 2 discussions with other action researchers at conferences enhanced the meaning of our own work and our knowledge of the history of collaborative action research.

9. Collaborative action research projects will be most successful when: school administrators provide support and voice any possible sanctions, research questions and agendas are not imposed prior to the formation of the team, and the research team maintains an awareness of issues of confidentiality and anonymity when collecting data from participants.

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APPENDIX A

Organizational Changes Effected Between 1981-82 and 1982-83 at PJHS

1. Homogeneous grouping expanded to include three 7th grade advanced English and three 7th grade prealgebra classes (one in each house) to match the three 8th grade advanced English and algebra classes.
2. No house coordinators, instead new department heads.
3. Department heads are teachers.
4. Set amount of time for all classes, 45 minutes.
5. Few staff changes.

6. New principal opens school this year.
7. Salary raises, pay period choice of 26 or 21 days.
8. Principal has been speaking to individual teachers about their concerns.
9. All faculty members have duties, e.g., homeroom, bus duty, cafeteria.
10. Everyone has study hall except department heads.

11. I.E.P.s completed by teachers for a whole year rather than each marking period.
12. Number of case workers for I.E.P. students reduced from seven to four (over 100 I.E.P.s).
13. Two behavioral management homerooms.
14. Changes in Resource team membership, e.g., new ideas.
15. P.E.E.P. and A.B.L.E.
16. KIDS 2 doubled in size.

17. Students have Specials - rotate on 4-day basis.
18. Students have elective choices within some Specials, e.g., art and music.

19. No in-school suspension.
20. Bells and tardy bell for changing classes.
21. Students not allowed to go to lockers between periods.
22. Computer scheduling of classes.

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Appendix B

STAFF OPINION SURVEY

ACTION RESEARCH ON CHANGE IN SCHOOLS

TEACHER SURVEY - NEW HAMPSHIRE

3 February 1982

TO: All Staff Members

FROM: Action Research Team

RE: Teacher Survey

Attached you will find a copy of the results of a recent survey you completed. The charts represent a detailed breakdown of the responses. The four academic areas appear first, math; social studies; science; and English; and then a sub-total. Next are five additional areas: home economics; industrial arts; music plus art plus physical education grouped together; resource people; and administration plus guidance followed by a sub-total of these areas. The overall school total is shown in the last column.

In questions that asked for an extended response, the most frequently mentioned top three responses are published. Responses are additionally broken down by academic teachers and non-academic teachers (meaning all other staff members). There were many more comments that were too numerous to print. All of your comments will be considered by the Action Research Team. In the near future, it is hoped that the Action Research Team will have a meeting to allow teachers to meet with us to discuss your concerns.

The Action Research Team greatly appreciates your cooperation and always welcomes your input. Again, many thanks for your assistance.

plw

Attachment

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plw

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Appendix B

NEW HAMPSHIRE
ACTION RESEARCH ON CHANGE IN SCHOOLS
TEACHER SURVEY
RESULTS

Preamble: I am a member of a 5 person action research team. The action research team has been funded by the National Institute of Education for a two year period to research issues of change in schools. We decided to conduct research on an issue important to our school. Scheduling seems the leading concern and problem.

Using the following format, we plan to interview all staff members who wish to be interviewed to determine their views on scheduling and related issues. We also wish to solicit your suggestions on specific avenues of research.

Your responses will be confidential. Aggregate results will be publicized. The findings are to help us direct our research.

(Have you any questions before we begin?)

Most of the responses have the following format: a) strongly disagree, b) disagree, c) agree, and d) strongly agree.

I. Views on Present Scheduling

1. The present schedule is satisfactory

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	0	2	1	1	4	3	2	3	2	3	13	17
b. disagree	3	3	3	3	12	1	1	1	1	0	4	16
c. agree	1	2	1	2	6	0	1	1	3	0	5	11
d. strongly agree	1	0	0	0	1	0	0	0	0	1	1	2

2. What things do you like most about present schedule?

Academic teachers

a) Length of class period
b) Five academic classes
c) Small classes

Non-Academic teachers

a) Length of class
b) Seven period day
c) Nothing

3. What things do you like least about present schedule?

Academic teachers

a) Study halls
b) Lack of flexibility
c) Not enough extra time during day for house meeting

Non-Academic teachers

a) Poor arrangements for specials classes
b) Study halls
c) Periods too short and too many classes

II. Schools-Within-A-School

1. The schools-within-a-school organizational concept should be retained.

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	0	0	2	0	2	0	0	0	0	0	0	2
b. disagree	1	0	1	1	3	0	0	2	3	0	5	8
c. agree	3	1	1	2	7	4	2	3	1	1	13	20
d. strongly agree	1	6	1	3	11	0	2	0	2	1	5	16

2. What things do you like most about "schools-within-a-school"?

Academic teachers

a) Teachers share common group of kids
b) Students have identity
c) Smaller classes

Non-Academic teachers

a) Students have identity
b) Teaching teams meeting time together to discuss kids
c) Less confusion - more organized

3. What things do you like least about "schools-within-a-school"?

Academic teachers

a) Isolates teachers from other teachers
b) Its not like it used to be
c) Not enough total school identity

Non-Academic teachers

a) Specialists not involved in teams
b) Isolates teachers and kids
c) Decreases flexibility

4. Teaching teams should have the opportunity to meet during school hours.

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	0	1	0	1	2	0	0	0	0	0	0	2
b. disagree	0	0	0	0	0	0	0	1	0	0	1	1
c. agree	1	1	3	3	8	4	3	4	2	0	13	21
d. strongly agree	3	5	2	2	12	0	1	1	4	4	10	22

5. Teaching teams memberships should be determined by the teachers.

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	0	1	1	0	2	0	0	1	1	0	2	4
b. disagree	0	1	1	0	2	1	1	1	1	0	4	6
c. agree	3	2	2	4	11	2	3	4	3	3	15	26
d. strongly agree	2	2	1	2	7	1	0	0	1	1	3	10

6. Teaching teams should be abandoned.

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	3	5	2	3	13	2	1	0	2	2	5	18
b. disagree	2	2	0	1	5	4	2	4	2	2	14	19
c. agree	0	0	1	1	2	0	0	1	2	0	3	5
d. strongly agree	0	0	2	1	3	0	0	0	0	0	0	3

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7. The action research group should study the educational value of "schools-within-a-school" and/or team teaching.

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	0	0	0	0	0	0	1	0	0	0	1	1
b. disagree	0	0	1	1	2	0	1	1	1	0	3	5
c. agree	5	7	3	2	17	3	2	2	4	2	13	30
d. strongly agree	0	0	1	2	3	0	0	1	1	2	4	7

III. Leadership

1. House coordinators should be retained.

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	1	0	0	2	3	0	0	3	2	1	6	9
b. disagree	0	3	2	1	6	0	1	1	1	0	3	9
c. agree	2	2	1	3	8	4	2	2	3	1	12	20
d. strongly agree	0	2	2	0	4	0	1	0	0	2	3	7

2. If there is to be system of house coordinators, there should be .... (how many?).

Academic teachers	Non-Academic teachers
a) One for each house	a) One for each house
b) One for each grade	b) One for each grade
c) Zero	c) Zero

3. Beginning next year, teachers, rather than administrators, should serve as department chairpersons.

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	0	1	0	0	1	0	0	0	0	0	0	1
b. disagree	0	0	0	1	1	1	1	0	1	0	3	4
c. agree	0	2	2	2	6	3	2	4	2	2	13	19
d. strongly agree	4	4	3	3	14	0	1	3	3	2	9	23

4. Were it not possible to have teachers serve as both house coordinator and department chairperson, which would you prefer?

a. teachers in the house coordinator role 23

b. teachers in the department chairperson role 18

5. The action research team should study the educational benefits of house coordinators and/or department chairpersons.

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	0	0	0	0	0	0	1	0	0	0	1	1
b. disagree	0	0	1	0	1	0	1	1	0	0	2	3
c. agree	4	6	3	4	17	3	2	3	4	2	14	31
d. strongly agree	0	0	1	1	2	0	0	2	1	2	5	7

IV. Ability Grouping

1. Homogeneous grouping by ability for all classes is best.

	M	SS	Sci	Eng	Sub	HE	IA	Mus PE	Art Res	Adm Gui	Sub	T
a. strongly disagree	3	2	2	1	8	2	2	0	0	2	6	14
b. disagree	2	3	1	2	8	1	2	3	2	2	10	18
c. agree	0	1	1	1	3	0	0	2	2	0	4	7
d. strongly agree	0	1	0	1	2	1	0	1	1	0	3	5

2. Heterogeneous grouping by ability for all classes is best.

	M	SS	Sci	Eng	Sub	HE	IA	Mus PE	Art Res	Adm Gui	Sub	T
a. strongly disagree	3	1	0	1	5	0	1	0	0	2	3	8
b. disagree	2	5	1	3	11	2	1	5	4	1	13	24
c. agree	0	0	3	1	4	1	1	0	1	0	3	7
d. strongly agree	0	1	0	0	1	1	1	0	0	1	3	4

3. Some subjects demand homogeneous ability grouping.

	M	SS	Sci	Eng	Sub	HE	IA	Mus PE	Art Res	Adm Gui	Sub	T
a. strongly disagree	0	0	0	0	0	1	1	0	0	0	2	2
b. disagree	0	0	0	0	0	1	1	1	0	0	3	3
c. agree	3	4	4	4	15	2	2	2	3	2	11	26
d. strongly agree	2	2	1	2	7	0	0	3	2	1	6	13

If agree, which ones?

Academic teachers

a) Math
b) English
c) Foreign language

Non-Academic teachers

a) Math
b) English
c) Advanced math and English

4. At least some classes should feature heterogeneous ability grouping.

	M	SS	Sci	Eng	Sub	HE	IA	Mus PE	Art Res	Adm Gui	Sub	T
a. strongly disagree	0	0	0	0	0	0	0	0	0	0	0	0
b. disagree	0	0	0	0	0	0	1	1	0	0	2	2
c. agree	2	5	4	3	14	3	2	3	4	1	13	27
d. strongly agree	2	2	1	1	6	1	1	1	1	2	6	12

If agree, which ones?

Academic teachers

a) Specials
b) Social studies
c) Science

Non-Academic teachers

a) Specials
b) Social studies
c) Science

5. The action research group should research homogeneous and heterogeneous grouping schemes.

	M	SS	Sci	Eng	Sub	HE	IA	Mus PE	Art Res	Adm Gui	Sub	T
a. strongly disagree	0	0	0	0	0	0	0	0	0	0	0	0
b. disagree	1	0	1	0	2	0	1	0	0	0	1	3
c. agree	3	4	4	4	15	3	3	3	5	3	17	32
d. strongly agree	1	3	0	1	5	0	0	2	1	1	4	9

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V. Time Frame

1. Present 50 minute classes are ideal.

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	0	0	0	1	1	1	1	0	0	0	2	3
b. disagree	0	3	0	2	5	2	2	0	1	1	6	11
c. agree	3	4	5	3	15	0	1	5	3	3	12	27
d. strongly agree	2	0	0	0	2	1	0	1	2	0	4	6

2. The perfect length in time for my class is . . . . minutes.

Academic teachers

a) All but two teachers said 45-50 minutes

Non-Academic teachers

a) Answers varied from 25 to 75 minutes
About half said 60-70 minutes

3. The action research group should study class length.

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	0	0	0	0	0	0	0	0	0	0	0	0
b. disagree	0	2	2	1	5	0	2	4	1	1	8	13
c. agree	3	4	3	3	13	2	2	0	4	3	11	24
d. strongly agree	2	1	0	1	4	2	0	2	0	1	5	9

VI. Other Scheduling Variations

1. Holding all classes in same order, every day is best.

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	2	4	1	0	7	0	0	2	0	0	2	9
b. disagree	0	1	2	2	5	2	1	2	1	1	7	12
c. agree	3	1	2	2	8	2	3	2	4	1	12	20
d. strongly agree	0	1	0	2	3	0	0	0	1	1	2	5

2. The rotation of the order of classes each day is best.

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	0	1	1	1	3	0	0	0	1	1	2	5
b. disagree	3	1	1	3	8	1	2	1	4	1	9	17
c. agree	1	2	1	2	6	2	0	3	0	2	7	13
d. strongly agree	1	3	2	0	6	0	1	2	1	0	4	10

3. Each team of teachers should be able to adjust the schedule to suit their needs to the greatest extent possible.

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	0	0	0	0	0	0	0	0	1	0	1	1
b. disagree	0	0	2	0	2	0	1	1	0	0	2	4
c. agree	3	5	3	3	14	2	2	5	4	4	17	31
d. strongly agree	2	2	0	3	7	2	1	0	1	0	4	11

4. The action research team should study the impact on learning of the static vs. the rotating order of daily classes.

	M	SS	Sci	Eng	Sub	HE	IA	Mus Art PE	Res	Adm Gui	Sub	T
a. strongly disagree	0	0	0	0	0	0	0	0	0	0	0	0
b. disagree	1	0	3	0	4	0	1	2	1	1	5	9
c. agree	3	5	2	3	13	3	2	3	4	3	15	28
d. strongly agree	1	2	0	1	4	0	1	1	0	0	2	6

VII. Prioritization of Research Topics

(Rank order)

_____ Homogeneous vs. heterogeneous grouping

_____ Schools-within-a-school

_____ Team teaching

_____ Value of house coordinator role

_____ Value of department chairperson role

_____ Effective length of classes (minutes per period)

_____ Static vs. rotating scheduling

Academic teachers (top three)

a) Homogeneous vs. heterogeneous
b) Schools-within-a-school
c) Static vs. rotating schedule

Non-Academic teachers (top three)

a) Effective length of classes
b) Schools-within-a-school
c) Homogeneous vs. heterogeneous

Other Comments

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Appendix C

PJHS History 1972-1982

24 March 1982

DRAFT

John Alden

These are the dates changes were made in our school system. I have tried to show the programs in chronological order. They are as accurate as a teacher's memory will permit.

1970-71

Double tracked ability grouping - Math track and English track

16 Grade 8 classes grouped A-P

10 Grade 7 classes at main building

6 Grade 7 classes at annex

St. Patrick's Parochial School in main building to take classes in shop, home economics, and physical education. A school built for 550 students at one point now houses over 1,000 students

Title I program begins

Office detentions from work program to locked-in (all students in a classroom) program

Superintendent orders science to develop and teach a program in sex education.

1971-72

Two new science labs

New science program developed during summer

Science on a seven week rotating program

Each student, 5 courses

5 teachers in main building

Teachers hand out own marks every 7 weeks

One 8th grade class broken and students placed in 5 other classes for science.

1972-73

Flexible multilevel parallel tracking program both grades

All students in four groups

- A - Advanced
- B - High Average
- C - Low Average
- D - Below Average

Classes within ability groups mixed

1973-74

During year principal leaves. Assistant principal becomes temporary principal; then retires. A new principal is selected. Annex principal becomes new assistant principal. New annex principal

New principal starts a faculty senate which meets weekly to discuss school problems. Members are selected by departments

Junction program begins?

1974-75

Staff development program to 5 school boards. It is approved

Principal move to high school, new principal again at junior high

May-7th period mini-courses assigned to all teachers

Junior High building program approved

Parochial students no longer come to Jr. High

1975-76

Districtwide staff development 6 year plan now in operation

School on split sessions at two buildings, 2 morning groups, 2 afternoon groups. Extra time to be used by teachers for meetings, school visitations, special planning

Special team project afternoons at annex in which 5 teachers try total team approach with 4 classes: 2 above average, 2 below average

Mainstreaming of all students begins

Weekend conference in Dover, brainstorming issues in teaching

1976-77

4 schools-within-a-school established at the Jr. High. Each school has a team of teachers, students, and specialists. Each school's schedule is developed by teachers within designated time blocks. Each school has an unpaid house coordinator. Split sessions continue until Christmas

One school has fewer students but all Title (special needs) students

Teacher Corps project submitted and approved

1977-78

4 house coordinators in charge of 4 houses (department heads dropped - principal and vice principal now department heads)

Houses balanced: each has same number of students. Time blocks established; each house given lunch time and specials and is free to create schedule in rest of time. Students traveled in groups

Teacher Corps project 2 years

Junction program ends

Supervisory union broken

School district separates from 4 towns. Area agreement still in effect. Towns still send students to high school

Newington has area agreement for 7th and 8th grade students to be educated at our schools

1978-79

KIDS II project starts for emotionally handicapped

KIDS II mainstreamed when possible (science and social studies)

Last year of Teacher Corps

I.E.P. students all in one house

1979-80

1980-81

P.E.E.P.S. program begins for preschool special education students

One house eliminated: teachers reassigned from 4 to 3 teams

I.E.P.s all houses

1981-82

Principal leaves. Temporary principal. New principal (former staff member) hired

Project A.R.C.S. begins

3 houses remain; 2 house coordinators serve all three houses

Schedules done by house coordinators (up to now vice principal in charge of scheduling)

In-school suspension program starts

7 period schedule instituted

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Appendix D

Human Services Survey/School Survey

ACTION RESEARCH ON CHANGE IN SCHOOLS May 1982

Preamble

In January, on our previous questionnaire, both academic and non-academic teachers ranked ability grouping (i.e., homogeneous and heterogeneous classes) and school within a school (i.e., teaming) among their top three priority issues for our research team to investigate. We would like to find out more about your perceptions of these issues by having you answer the questions below.

The responses are strictly confidential and only group results will be reported at a later date.

We appreciate your assistance.

Demographic Data

Your sex: ____ (1) male
____ (2) female

Marital status:

____ (1) single
____ (2) married
____ (3) divorced
____ (4) widowed
____ (5) other (please specify _____)

If married, for how long have you been married to your current spouse?

____ years

If you have children, how many of them are now living with you?

____ children live with me

____ I have no children

Please check the highest degree you have received:

____ BA/BS ____ MA+15
____ BA+15 ____ MA+30
____ MA ____ CAGS/2 MA

What is the subject area in which you teach? _____
Grade level? _____

Number of years teaching at Portsmouth Junior High School? _____
Total number of years teaching? _____

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Human Services Survey

How Often:	0 Never	1 A few times a year or less	2 Once a month or less	3 A few times a month	4 Once a week	5 A few times a week	6 Every day	
How Strong:	0 Never	1 Very mild, barely noticeable	2	3	4 Moderate	5	6	7 Major, very strong

How Often 0-6	How Strong 0-7	Statements:
1. ____	____	I feel emotionally drained from my work.
2. ____	____	I feel used up at the end of the workday.
3. ____	____	I feel fatigued when I get up in the morning and have to face another day on the job.
4. ____	____	I can easily understand how my students feel about things.
5. ____	____	I feel I treat some students as if they were impersonal objects.
6. ____	____	Working with people all day is really a strain for me.
7. ____	____	I deal very effectively with the problems of my students.
8. ____	____	I feel burned out from my work.
9. ____	____	I feel I'm positively influencing other people's lives through my work.
10. ____	____	I've become more callous toward people since I took this job.
11. ____	____	I worry that this job is hardening me emotionally.
12. ____	____	I feel very energetic.
13. ____	____	I feel frustrated by my job.
14. ____	____	I feel I'm working too hard on my job.
15. ____	____	I don't really care what happens to some students.
16. ____	____	Working with people directly puts too much stress on me.
17. ____	____	I can easily create a relaxed atmosphere with my students.
18. ____	____	I feel exhilarated after working closely with my students.
19. ____	____	I have accomplished many worthwhile things in this job.
20. ____	____	I feel like I'm at the end of my rope.
21. ____	____	In my work, I deal with emotional problems very calmly.
22. ____	____	I feel students blame me for some of their problems.

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Please indicate how you feel about the following statements:

A. Definitely agree; B. Agree; C. Maybe; D. Disagree; E. Definitely disagree

_____ 1. Your current schedule best utilizes your talent as a teacher.

_____ 2. Team teaching is beneficial for teachers.

_____ 3. You have time to discuss student problems with a colleague.

_____ 4. You have time to talk to other staff members.

_____ 5. You have time to share ideas and materials with other staff members.

_____ 6. There is time to make teacher-made materials and lesson plans.

_____ 7. You have time to form lesson objectives and break them down into small steps.

_____ 8. Your schedule provides planning time to accommodate individual differences among students.

_____ 9. You like to be part of a teaching team.

_____ 10. You prefer to work individually rather than with a team.

_____ 11. Every teacher should teach reading.

_____ 12. You prefer to teach at one grade level.

_____ 13. Every teacher should have the same amount of planning time.

_____ 14. Scheduling should permit a matchup between teachers' teaching styles and students' learning styles.

_____ 15. Scheduling should be done so that class loads are relatively equal.

_____ 16. You have been involved in scheduling decisions on teaming.

_____ 17. You have been involved in scheduling decisions on heterogeneous and homogeneous grouping of classes.

_____ 18. You are clear about the goals of teaming at Portsmouth Junior High School.

_____ 19. You are clear about the goals of homogeneous and heterogeneous grouping of students at PJHS.

_____ 20. You are satisfied working with the present members of your team.

_____ 21. You are satisfied with the present homogeneous and heterogeneous grouping of students.

Appendix E

Interview Questions for PJHS Teachers, 1982

Introduction to Teacher Interviews
Portsmouth Junior High School
November, 1982

We have decided to ask several teachers to help in validating our research data by discussing several points. Please respond in the knowledge that we are speaking in confidence. Thank you for your cooperation.

1. Do you feel that this school has a philosophy, or general goals? If so, what do you think it is? If not, do you think we should have one? Why or why not?

2. Do you feel like you have time/are free to communicate with colleagues? Administration? Does your freedom or lack of it affect how you feel about teaching here?

3. What is your schedule? Are you satisfied with the schedule now? What changes would you like to see? Do you think these changes will occur? Why or why not?

4. Were you aware of any changes made in the schedule this year? Did they affect you in any way? (e.g., see changes on other sheet)

5. Have any of these changes affected your students' behavior? Achievement?

6. Each school is made up of teams of teachers. What do you feel a team is at PJHS? What should it be? Has it changed from last year?- Do you think it is valuable? Does teaming affect your working conditions at PJHS (e.g., job satisfaction, level of morale, attitudes toward students)? Does teaming affect students' achievement and learning conditions? If so, how?

7. Do you think homogeneous and heterogeneous grouping of students affects your working conditions (e.g., job satisfaction, level of morale, attitudes toward students)? Does it affect students' learning conditions and achievement? If so, how?

8. Did any changes this year affect how you feel about your job, or your level of morale (e.g., salary raise, change in schedule, having a home room, having a study)?

9. Are there any things outside of school that are affecting your morale this year? Would you be willing to describe them?